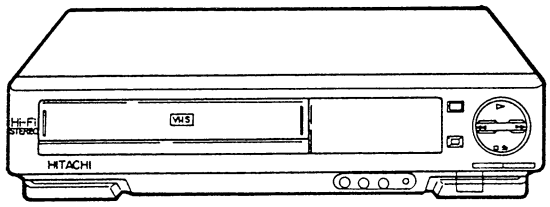
HITACHI

TK | No.4403E,G

VT-F350E Series

SERVICE MANUAL
Wartungsanleitung



VT-F350E(UKN)
VT-F350E(CT)
VT-F350E(CTN)
VT-F351E(CTN)
VT-F355E(VPS)

Manuals related to the VT-F350E Series

Name of Manual	Manual No.	Language
VT-F250E Series	4314E,G	English
Chapters Included		
Chapter 2	Pages E2-1 to E2-14	
Chapter 3	Pages E3-1 to E3-7 Pages E3-9 to E3-14	
VT-F350E(UKN),(CT) VT-F355E(VPS) Parts List	4403E, G-1	English

Anleitungen für die Modelle VT-F350 Serie betreffen

Name der Anleitung	Anleitung-Nr.	Sprache
VT-F250E Serie	4314E,G	Deutsch
Enthaltene Kapitel		
Kapitel 2	Seiten G2-1 bis G2-14	
Kapitel 3	Setien G3-1 bis G3-7 Seiten G3-9 bis G3-14	
VT-F350E(UKN),(CT) VT-F355E(VPS) Ersatzteilliste	4403E, G-1	Deutsch

VHS

This video desk is a VHS type video recorder. For proper operation, only the VHS type cassette must be used.

VHS

Dieser Video-Recorder entspricht dem VHS-Format. Für richtigen Betrieb müssen daher VHS-Magnetband-Cassetten verwendet werden.

SPECIFICATIONS AND PARTS ARE SUBJECT TO CHANGE FOR IMPROVEMENT
Änderungen der Technischen Daten und Teile im Sinne ständiger Verbesserung vorbehalten.

VIDEO CASSETTE RECORDER
Video-Cassettenrecorder

March 1994 TOKAI Consumer Electronics Division

ENGLISH

SAFETY PRECAUTIONS

The following precautions should be observed when servicing.

1. Since many parts in the unit have special safety-related characteristics, always use genuine Hitachi replacement parts. Especially critical parts in the power circuit block should not be replaced with other makers'. Critical parts are marked with ⚠ in the schematic diagram.
2. Before returning a repaired unit to the customer, the service technician must thoroughly test the unit to ascertain that it is completely safe to operate without any danger of electrical shock.

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SPECIFICATIONS

Format:	VHS PAL Standard
Recording:	Rotary Two-Head Helical Scan Azimuth Recording
Tape Speed:	23.39 mm/sec. — SP
Tape Width:	12.7 mm
Operation Temperature:	5°C to 40°C
Video:	PAL colour (system B & G) & CCIR monochrome signals 625 lines
Recording Time:	240 min. with E-240 cassette — SP
	VHF channels 2 — 12
	CATV channels S1 — S41
	CATV channels U1 — U5
Aerial Input:	UHF channels 21 — 69
RF Output:	UHF channel 37 (32 — 42 adjustable) (System G)
Video Input:	0.5 to 1.5Vp-p 75 ohm Unbalanced
Video Output:	1Vp-p 75 ohm Unbalanced
S/N Ratio (Video):	More than 43 dB
Horizontal Resolution:	Colour 260 lines
Audio (Linear)	
Input:	PERI: — 3.8 dBm 10 Kohm, LINE: — 7.8 dBm 50 Kohm
Output:	— 3.8 dBm 1 Kohm
S/N Ratio:	43 dB
Frequency Range:	70 Hz to 12 kHz
Hi-Fi Audio	
Frequency Range:	20 Hz to 20 kHz
Dynamic Range:	More than 85 dB
Wow and Flutter	Less than 0.005% WRMS
Power:	AC 230V, 50 Hz
Power Consumption:	VT-F350E(CTN) 22W (including timer)
	VT-F351E(CTN) 22W (including timer)
	VT-F350E(CT) 21W (including timer)
Timer:	24-hour digital indication
Cabinet Size:	380 mm(W) x 82 mm(H) x 328 mm(D)
Weight:	Approx. 4.7 kg
Accessories Included:	1 — Dust preventive socket cober
	1 — Infrared remote control handset
	2 — Batteries
	1 — Dust preventive socket cover

* Design and specifications are subject to change without notice.

COMPARISON OF FEATURES

	ITEM	VT-F350E/F351E/F355E	VT-F250E/F255E
GENERAL	VIDEO HEADS	3 Heads + Hi-Fi (Except for UKN) SP: 48 μm Hi-Fi: 28 μm DA4 Heads + Hi-Fi (For UKN) LP: 30 μm	3 Heads + Hi-Fi SP: 48 μm Hi-Fi: 28 μm
	BASIC CHASSIS TYPE	ACE	ACE
	CAPSTAN DRIVE	DIRECT DRIVE	DIRECT DRIVE
	CYLINDER MOTOR	THREE-PHASE OUTER ROTOR: 360Hz	THREE-PHASE OUTER ROTOR: 360Hz
VIDEO	PAL COLOUR	B/G (Except for UKN) I (For UKN)	B/G (Except for UKN) I (For UKN)
	MESECAM COLOUR	NO	NO
TUNER	TUNING SYSTEM	F.S TUNING	F.S TUNING
	CATV	YES (Except for UKN)	YES (Except for UKN)
	CHANNEL PRESET No.	49CH	49CH
	RF CONVERTER	B/G (Except for UKN) I (For UKN)	B/G (Except for UKN) I (For UKN)
	RF CONV. CHANNEL (32-42)	37	37
	A2	YES (For CT, VPS)	YES (For CT, VPS)
	UK NICAM	YES (For CT, VPS)	YES (For CT, VPS)
	CT NICAM	YES (For CT, VPS)	YES (For CT, VPS)
TIMER	REC. PROGRAMME	8 PROG./1 YEAR	8 PROG./1 YEAR
	DIMMER	NO	NO
	IRT	LENGTH Only	LENGTH Only
	BACK-UP TIME	ABOUT 30 MIN.	ABOUT 30 MIN.
	VPS	YES (For VPS) OPTION (For CT, CTN)	YES (For VPS) OPTION (For CT, CTN)
OTHER FEATURES	PROGRAMME EDIT	NO	NO
	HEAD PHONE JACK	NO	NO
	AUTO HEAD CLEANING	YES	YES
	MANUAL HEAD CLEANING	NO	NO
	EDIT IN/OUT JACK	YES	YES
	TAPE SPEED	SP (LP:UKN Only)	SP
	VIDEO DUB	NO	NO
	AUDIO DUB	NO	NO
	X2 PLAY	YES (SHUTTLE)	NO
	SLOW/REV.SLOW PLAY	YES (SHUTTLE)	YES/NO
	F.ADV/REV.F.ADV PLAY	YES (SHUTTLE)	YES/NO
	LP SPECIAL EFFECT	YES	NO
	SHUTTLE RING	YES	NO
	AI PICTURE	NO	NO
	FRONT A/V INPUT JACK	YES	NO
	COUNTER GO-TO	YES	YES
AUTO FEATURES	AUTO TRACKING	YES	YES
	AUTO OPERATE ON	YES	YES
	AUTO PLAY	YES	YES
	AUTO EJECT	YES	YES
	AUTO REWIND	YES	YES
	AUTO REW.SHUT OFF	YES	YES
	AUTO TAPE CANCELLER	YES	YES
REMOTE CONTROL	PROGRAMME SETTING	LCD	LCD
	CLOCK SETTING	LCD	LCD
	VTR1/VTR2/TV	YES	YES
	PROGRAMME MEMORY	YES	YES
	VIDEO PLUS	YES	YES (For UKN)

COMPARISON OF MAIN CONTROL ICs

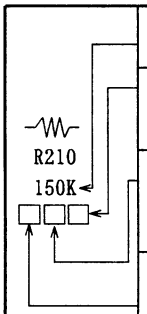
ITEM	VT-F350E/F351E/F355E		VT-F250E/F255E	
VIDEO SYSTEM				
Y PROCESS	HT7278	(IC201)	HT7278	(IC201)
CCD DELAY	MSM7403RS	(IC202)	MSM7403RS	(IC202)
PRE/REC AMP				
VIDEO HEAD AMP	HA118162NT	(IC01)	HA118162NT	(IC01)
AUDIO HEAD AMP	XRA7740S	(IC02)	XRA7740S	(IC02)
FM DET	BA7047S	(IC03)	BA7047S	(IC03)
ON SCREEN DISPLAY				
CHARACTER GENERATOR	M35010-013SP	(IC1401)	M35010-013SP	(IC1401)
AFC/SYNC-SEPA	BA7046A	(IC1441)	BA7046A	(IC1441)
AUDIO				
FM AUDIO PROCESS	AN3961NFBPAA	(IC501)	AN3961NFB	(IC501)
METER CONTROL	BA6138	(IC502)	BA6138	(IC502)
SERVO				
SERVO CONTROL	HD49781ANT	(IC601)	HD49781NT	(IC601)
FG AMP	NJM4558D	(IC651)	NJM4558D	(IC651)
SYSTEM CONTROL/TIMER				
SYSTEM CONTROL μP/TIMER μP	M38184M8-226FP [Except For CT]	(IC901)	M38184M8-121FP [Except For CT]	(IC901)
	M38184M8-227FP [For CT]	(IC901)	M38184M8-122,126FP [For CT]	(IC901)
TAPE LOADING DRIVE	XRA6209U4 or BA6209U4	(IC904)	XRA6209U4	(IC904)
EA-ROM	X24C01A	(IC903)	X24C01A	(IC903)
NICAM				
NICAM DECODER	CF70091	(IC1801)	CF70091	(IC1801)
D/A CONV.	TDA1543	(IC1802)	TDA1543	(IC1802)
DUAL OPE. AMP	BA4560	(IC1803)	BA4560	(IC1803)
SWITCH	BA3129D	(IC1804)	BA6129D	(IC1804)
ACTIVE FILTER	AFS816F	(IC1806)	AFS816F	(IC1806)
VPS				
VPS DECODER	HES8052A	(IC1503)	HES8052A	(IC1503)
A2				
ST/DUAL SOUND PROCESSOR	TDA8417	(IC1851)	TDA8417	(IC1851)
FM DEMODULATOR	TDA9821	(IC1852)	TDA9821	(IC1852)

WHEN USING THIS SERVICE REFERENCE MATERIAL

1. How to Read Abbreviations

Values, dielectric resistances (power capacitances), tolerances, grades of resistors (excluding variable resistors, etc.) and capacitors are indicated in the schematic diagrams using abbreviations. Collate these abbreviations and the following tables to read abbreviations and replace parts correctly.

[RESISTORS]

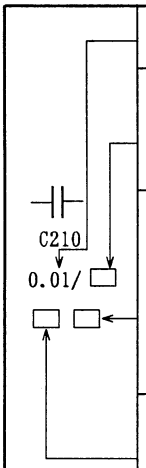


Value	No indication ····· ohm K ····· kohm
Tolerance	No indication ····· ± 5% K ····· ±10% M ····· ±20%
Power capacitance	No indication ····· 1/8W (All capacitances other than 1/8W are indicated in schematic diagrams with W omitted.)
Type	No indication ·· Carbon film fixed RC ····· Carbon solid RW ····· Power-type wire wound solid RS ····· Metal oxide film solid RN ····· Metal film solid

Example

R210
150K ····· 150 kohm, carbon solid
RC.1/2.K 1/2W, ±10%

[CAPACITORS]



Value	No indication ····· μF P ····· PF
Dielectric resistance	No indication ····· 50WV (All resistances other than 50WV and those of electrolytic capacitors are indicated with WV omitted.)
Tolerances	No indication ····· ±10% J ····· ± 5% M ····· ±20% C ····· ±0.25PF Z ····· +80%-20% (No indication for electrolytic capacitors. (excluding tantalum and high stability electrolytic capacitors.)
Type	No indication ··· Ceramic, general electrolytic (see circuit symbol to distinguish from ceramic.) MYL ····· Mylar (Polyester film) STY ····· Styrol TA ····· Tantalum KU ····· High stability electrolytic MP ····· Metallized paper

Example

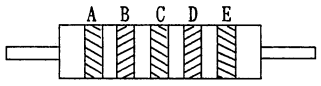
C210
0.01/25 ····· Mylar, 0.01μF, 25WV
MYL.J ±5%

2. Markings in Schematic and Circuit Board Diagrams

(1) Parts with marks "■" attached to circuit numbers in the schematic and circuit board diagrams are discrete components.
(2) Parts with marks "●" attached to circuit numbers in the schematic and circuit board diagrams are chip components.
(3) Parts with marks Ⓩ in the circuit board diagrams are leadless jumpers.

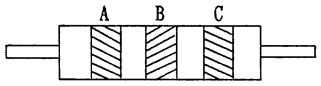
3. How to Read Capacitance of Resistance-Type Capacitors and Coils

[CAPACITOR]



CAPACITY : (10A+B)×C (PF)
TOLERANCE : D
RATED VOLTAGE : BODY COLOR
PINK : 25V
GREEN : 50V
CHARACTERISTICS : E

[COIL]



INDUCTANCE : (10A+B)×C (μH)

COLOR	A, B	C	D	E
Black	0	10^0	±20%	For temperature compensation
Brown	1	10^1		
Red	2	10^2		
Orange	3	10^3		
Yellow	4	10^4		
Green	5	10^5		
Blue	6			
Violet	7			
Gray	8		±30%	High dielectric constant type
White	9			For temperature compensation
Gold		10^{-1}	± 5%	
Silver		10^{-2}	±10%	High dielectric constant type

4. Cautions on Use of MOS ICs

(1) MOS ICs are inserted in black foam for shipment. This foam is a conductor which short-circuits between the leads to prevent damage. Do not remove ICs from this foam during storage. Avoid removing ICs from this foam, placing them on plastic which is likely to be charged with static electricity or inserting them into styrol foam.
(2) High voltages may be applied during soldering caused by leakages from the soldering iron. Be sure to ground the tip of the soldering iron or use a low voltage soldering iron.
(3) The human body and clothes made of synthetic fiber or nylon gloves may be charged with several thousand volts of static electricity because of friction. Workers should be grounded.

SERVICE MANUAL ABBREVIATION LIST

A	
ACC	Automatic Color Control
ACK	Automatic Color Killer
ADC B-Y	Analog to Digital Converted B-Y Signal
ADC R-Y	Analog to Digital Converted R-Y Signal
ADC Y	Analog to Digital Converted Luminance
ADD	Adder
ADRS	Address
A.DUB	Audio Dubbing
AF	Autofocus
AFC	Automatic Frequency Control
AGC	Automatic Gain Control
AGC KILLER	AGC Killer Voltage
ALC	Automatic Level Control
AIC	Automatic Iris Control
AM	Amplitude Modulation
AMP	Amplifier
APC	Automatic Phase Control
ASBL	Assemble (Phase Matching)
AUD.	Audio
AUX	Auxiliary
A5V	Always 5V B+ Source
B	
B (BLU)	Color Signal BLUE
BATT.	Battery
BF	Burst Flag
BG	Burst Gate or Back Ground
BGP	Burst Gate Pulse
BH	Power Supply for Selecting VHF High Band
BL	Power Supply for Selecting VHF Low Band
BLK	Blanking
BM	Power Supply for Selecting VHF Mid Band
BPF	Bandpass Filter
BS	Power Supply for Selecting VHF Super Band
BU	Power Supply for Selecting UHF Band
BU	Back-up
BUF.	Buffer Amplifier
B-YL	Battery
C	
C	Chroma
C (CHROMA)	Chrominance Signal
CAPST.	Capstan
CAS	Column Address Strobe
CARRI.	Carrier
CATV	Cable TV
C.BLANK	Chroma Blanking
C.BLK	Composite Blanking
CCD	Charge Coupled Device
CG	Character Generator
C.FG/CFG	Capstan Frequency Generater
C.FREE RUN	Chapstan Free Run
CH	Channel
CHD	Camera Horizontal Drive Pulse
CHAR.	Character
CHROMA	Chrominance
C.MEMORY	Counter Memory
CNR	Chroma Noise Reducer
COM.	Common
COM.	Composite
COMPA	Comparator
COMPE	Compensator
COMPO	Composite
COMP-EXP	Compressor-Expander
CONV.	Converter
CONT	Control
CORR.	Correlation
COUNT.	Counter
CP	Clamp Pulse
C.PAUSE	Camera Pause
C/R	Capacitor/Resistor
C.RESET	Counter Reset
C.REVERSE	Count Reverse
CST	Cassette

C	
C.SYNC	Composite Synchronizing Signal
CTL	Control Track Pulse (Control)
CYL	Cylinder
CY (CYAN)	Color Signal CYAN
D	
DA	Double Azimuth
D/A	Digital to Analog Converter
D-D	Direct Drive
DEEMPHA.	Deemphasis
DEF	Deflection
DEMOD.	Demodulator
DEMPX	Demultiplexer
DET	Detector
DIFF. AMP	Differential Amplifier
DISCRI.	Discriminator
DISP.	Display
DL	Delay Line
DN	Down
DO	Dropout
DOC	Dropout Compensator
DRAM	Dynamic Random Access Memory
D.REF 25/30	Delayed Reference 25/30Hz
D.SW 25/30	Delayed Switching 25/30Hz
DSP	Digital Signal Processor
DT/OE	Data Transfer/Output Enable
D/W	Dark/White
DWC	Delayed Write Clock
E	
EA-ROM	Electrically Alterable Read Only Memory
E-E	Electronic-to-Electronic
EMPHA.	Emphasis
EQ	Equalizer
EVF	Electronic Viewfinder
EXT.	External
F	
F.ADV	Frame Advance
F/V	Frequency-to-Voltage Converter
FB	Feed Back
FF	Flip Flop
F.FWD	Fast Forward
FG	Frequency Generator
FM	Frequency Modulation
FREQ.	Frequency
FRAME ADV	Frame Advance
Fsc	Color Sub Carrier Frequency
FWD	Forward
G	
GEN	Generator
GND	Ground
H	
H	Horizontal
HBF	Horizontal Burst Flag
HD	Horizontal Drive
Hi-Fi	High Fidelity
HLT	Halt
HPF	High-pass Filter
HPL	High-pass Limiter
HSS	Horizontal Sync. Separator
I	
IF	Intermediate Frequency
INC	Row Counter Increment
INDI.	Indicator
INT.	Internal
INV.	Inverter
I/O	In/Out (Input/Output)
IR	Infrared Rays
IRIS DET	Iris Detection
IRT	Instant Recording Timer
L	
LCD	Liquid Crystal Display
LIN.	Linear
LM	Loading Motor

L	
LNC	Line Noise Canceller
LOG	Logarithm
LP	Long Play
LP (H)	Long Play Signal (Active High)
LPF	Low-pass Filter
LUMA	Luminance
L/R	Left/Right
M	
MAN	Manual
M.BRAKE	Main Brake
M.CUT	Monitor Cut
MEM.	Memory
MEM ON	Memory ON
MEM SW	Memory Switch
MEM VIDEO	Memorized Video
MIX	Mixer
MMV	Monostable Multivibrator
MOD.	Modulator
MPX	Multiplex
MPX VIDEO	Multiplexed Video
M.STATE	Mechanism State
M.STOP	Memory Stop
MTS	Multi Channel Television Sound
N	
NEG	Negative
NFB	Negative Feed Back
NORM. or NOR.	Normal
NR	Noise Reduction
O	
OB	Optical Black
O/E	Odd/Even Field
OSC	Oscillator
OSD	On-Screen Display
P	
PB/PLAY	Playback
P.CONT	Power Control
PIF	Picture Intermediate Frequency
PG	Pulse Generator
P IN P	Picture in Picture
PIX MOVE	Picture Move
PLL	Phase Locked Loop
POS.	Positive
POWER CONT.	Power Control
PROG.	Program
PROTECT.	Protector
PWM	Pulse Width Modulation
R	
R (RED)	Color Signal RED
RAM	Random Access Memory
RAS	Row Address Strobe
RC	Reading Clock
RCC	Reading Clock Clear
RCR	Row Counter Reset
REC	Record
RECT.	Rectifier
REF	Reference
REF 25/30	Reference 25/30Hz from servo circuit
REG	Regulator
REL	Refresh Control
REW	Rewind
REV	Reverse
RF	Radio Frequency
RM	Reel Motor
ROM	Read Only Memory
R-YL	Color Difference Signal R-YL
S	
SAP	Second Audio Program
SAW	Sawtooth
SC	Serial Control
SC1 (0°)	3.58MHz Subcarrier Signal 1 (0-degree Phase Shifted)

S	
SC2 (90°)	3.58MHz Subcarrier Signal 2 (90-degree Phase Shifted)
SEP.	Separator
SG	Signal Generator
S/H	Sample and Hold
SIF	Sound Intermediate Frequency
SOL	Solenoid
SP	Standard Play
SP/LP	Standard Play/Long Play
S.REEL	Supply Reel Sensor
SRCH	Search
SRV	Servo
STABI.	Stabilizer
S.TRACK	Slow Tracking
STBY	Standby Mode
S-VHS	Super VHS
SW 15Hz	15Hz Head Switching Pulse
SW 25/30Hz	25/30Hz Head Switching Pulse
SYNC	Synchronizing signal
SYS.CON	System Control
T	
T (TELE)	Telephoto Angle
T.BRAKE	Take-up Brake
T/L	Tuner/Line
TP	Test Point
T.REEL	Take-up Reel Sensor
T.RESET	Timer Reset
TRS	Transfer
TμP	Timer Microprocessor
TU-μP	Tuning Microprocessor
U	
U/D	Up/Down
UNI.	Unified
V	
V (VERT)	Vertical
VAR	Variable
V.AGC	AGC Voltage
VCA	Voltage Controlled Amplitier
VCO	Voltage Controlled Oscillator
V.DRV	Vertical Drive Pulse
V.DUB	Video Dubbing
V/F	Voltage to Frequency Converter
VHS	Video Home System
VF	Focus Voltage
VOL.	Volume
V-REF	Voltage Reference
VP	Vertical Pulse
VSS	Vertical Sync. Separator
Vss	Voltage Super Source
VT	Tuning Voltage
VT-U	Tuning Voltage-UHF
VT-V	Tuning Voltage-VHF
VCXO	Voltage Controlled Crystal Oscillator
W	
WC	Write Clock
WCC	Write Clock Clear
WE	Weighting
WHT	Color Signal WHITE
WIDE	Wide Angle
WHD	Wide Horizontal Drive
WHT BAL CONT.	White Balance Control
Y	
Y	Luminance Signal
Y/C	Luminance/Chrominance
YE (YEL)	Color Singal YELLOW
YL	Luminance Signal (Low Component)
ANOTHER	
μP	Microprocessor
5V	ON 5V B+ Source
9V	ON 9V B+ Source

DISASSEMBLY

1. NAMES AND LOCATIONS OF CIRCUIT BOARDS

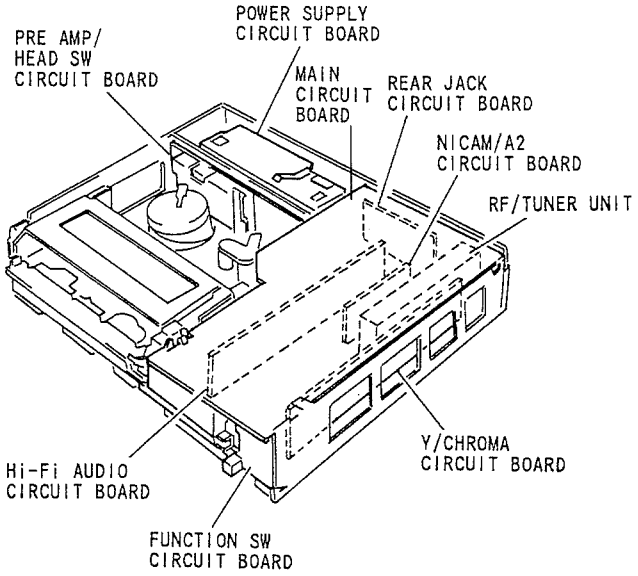


Fig. 1-1 Top View

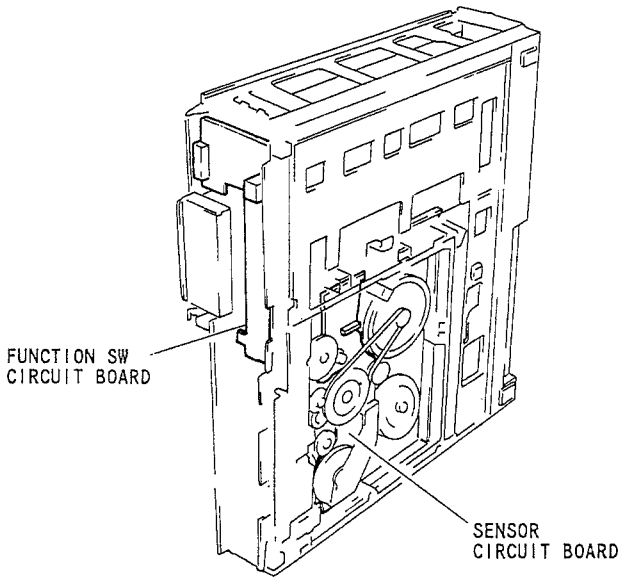


Fig. 1-2 Bottom View

[Procedure when removing]
Remove the components in the order of letters (A, B, C ···) in the illustrations.
[Procedure when reinstalling]
Reinstall the components by the reverse procedure to removal when not otherwise specified.

2. CASE REMOVAL

1. Top Cover

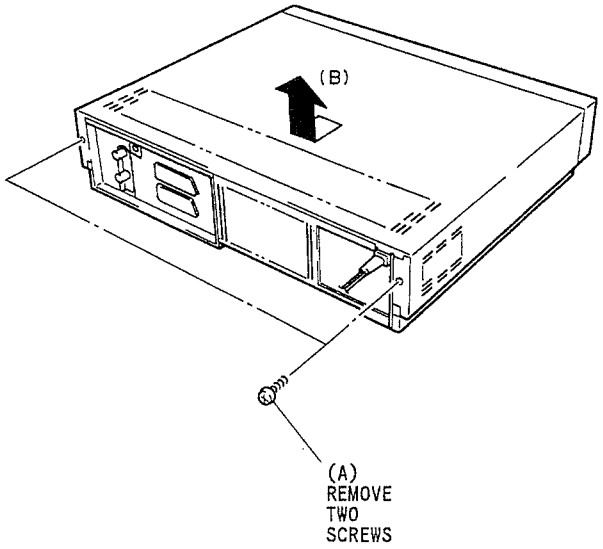


Fig. 2-1

2. Bottom Cover

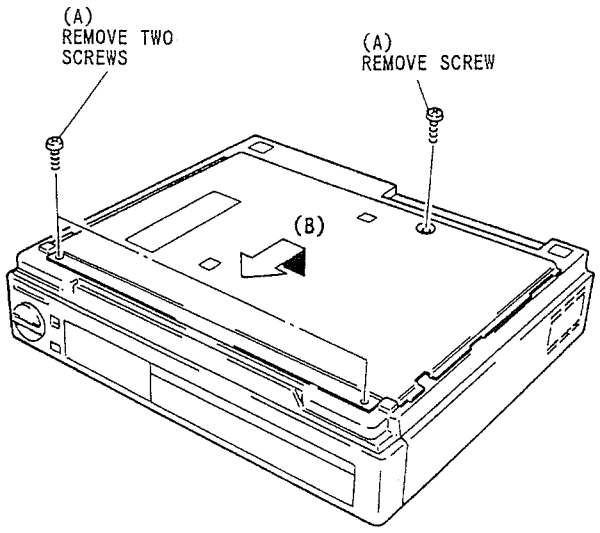


Fig. 2-2

3. Front Panel
◆ Components to remove first
1) Top Cover (Item 2-1)
2) Bottom Cover (Item 2-2)
◆ Caution when reinstalling
· Reinstall the front panel while the cassette door is pushed in halfway so that the boss of door actuating arm can be positively engaged with the recess on the side of the door as shown below.

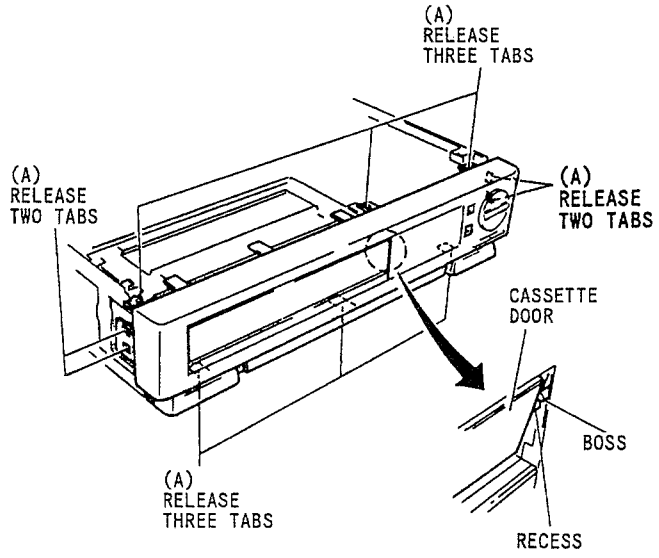


Fig. 2-3

4. Cassette Door
◆ Components to remove first
1) Front Panel (Item 2-3)
◆ Caution when reinstalling
· Attach the spring at the right of the cassette door firmly.

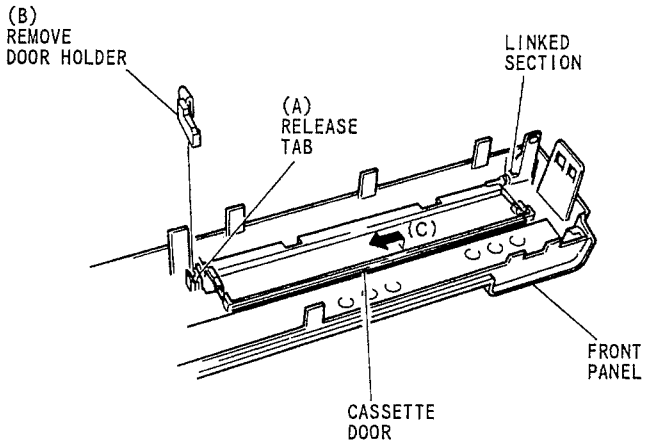


Fig. 2-4

5. Rear Panel
◆ Components to remove first
1) Main circuit board (Item 3-3)

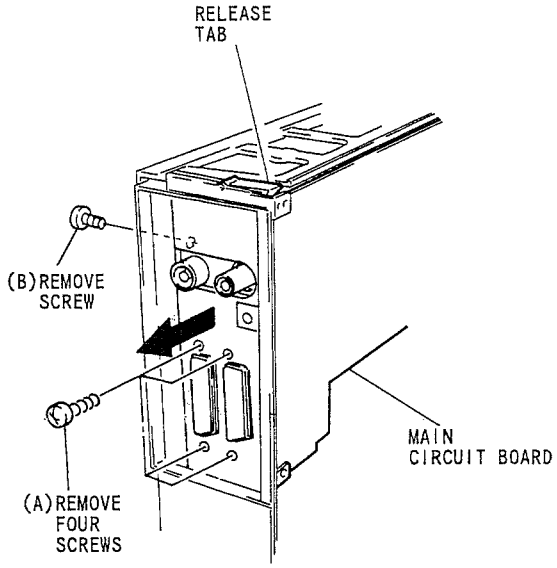


Fig. 2-5

3. CIRCUIT BOARD REMOVAL
1. Function SW Circuit Board
◆ Components to remove first
1) Front Panel (Item 2-3)

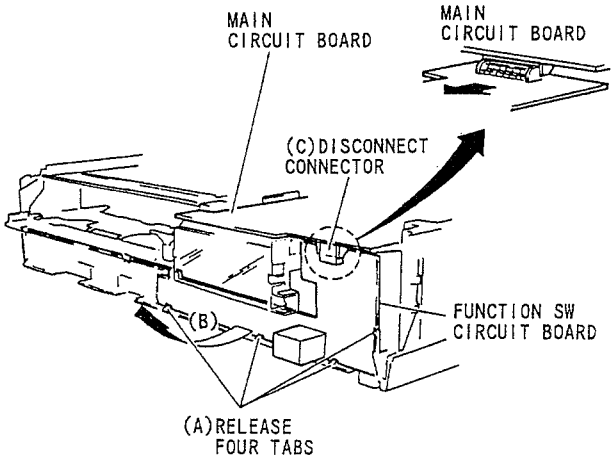


Fig. 3-1

2. Main Circuit Board
◆ Components to remove first
1) Function SW circuit boards (Item 3-1)

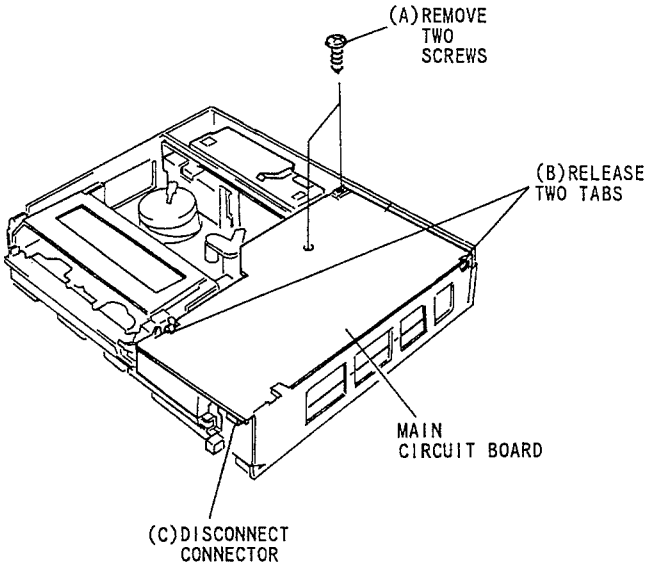


Fig. 3-2

3. Y/Chroma, HiFi Audio, Nicam/A2 Circuit Boards
◆ Components to remove first
1) Main circuit board (Item 3-2)

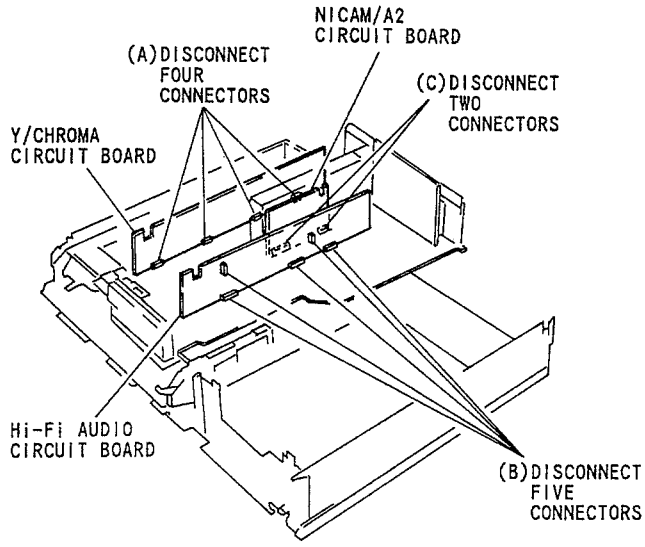


Fig. 3-3

4. Rear Jack Circuit Board
◆ Components to remove first
1) Main Circuit board (Item 3-2)
2) Rear Panel (Item 2-5)

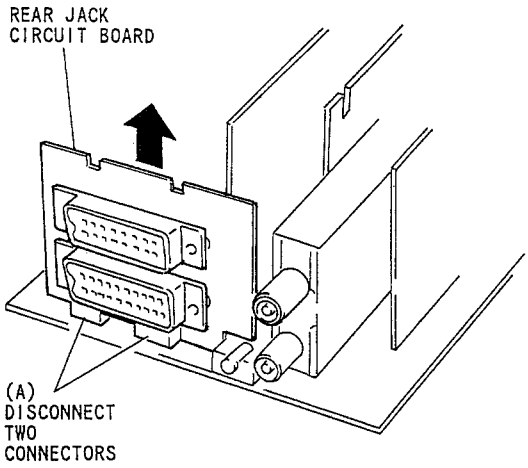


Fig. 3-4

5. Power Supply Circuit Board
6. Pre-Amp/Head SW Circuit Board

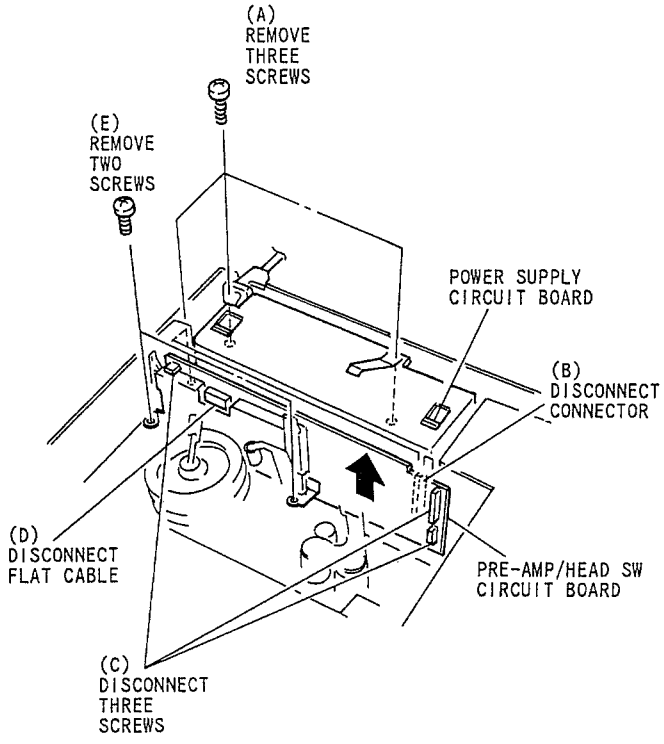


Fig. 3-5

7. Sensor Circuit Board
◆ Components to remove first
1) Centre pulley/FL Relay Gear (B) (Item 6-16)
2) Roller Plate/Mode Gear (item 6-18)

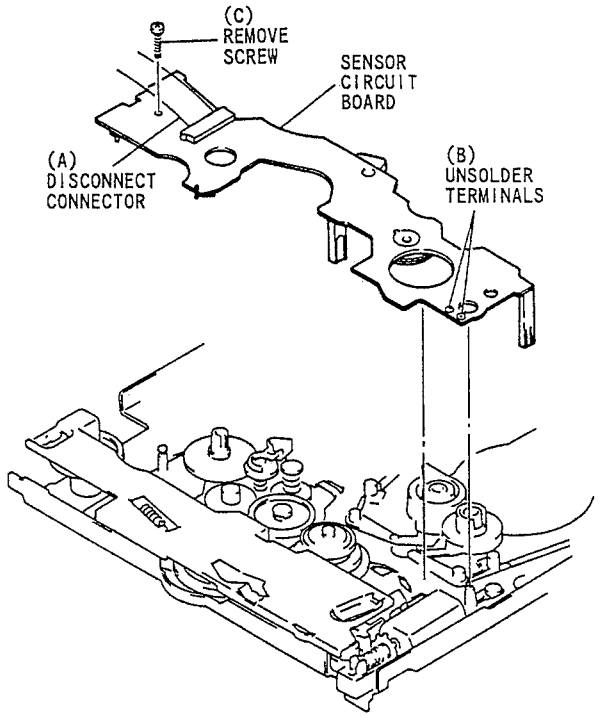
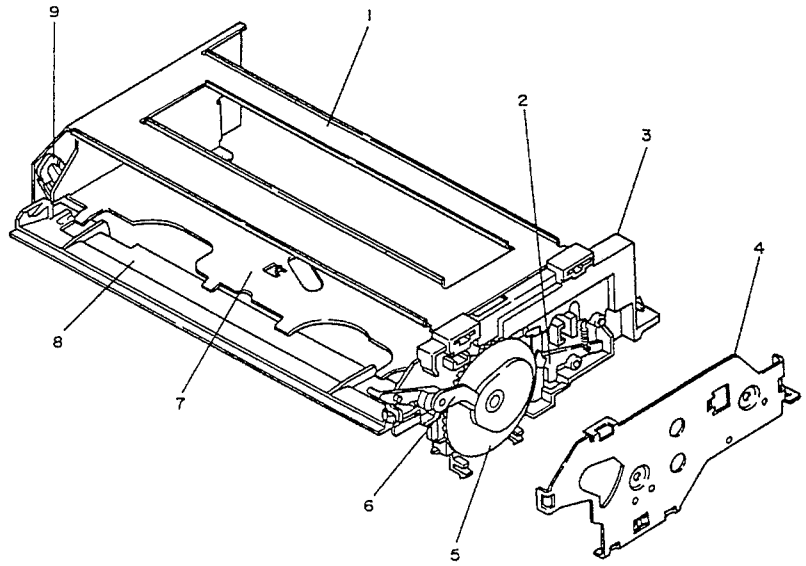


Fig. 3-6

4. IDENTIFICATIONS AND LOCATIONS OF MAIN MECHANICAL COMPONENTS



1. Chassis Holder
2. Switch Arm
3. Side Chassis
4. Gear Bracket
5. FL Gear
6. Door Arm
7. Cassette Holder
8. Front Holder
9. FL Drive Arm

Fig. 4-1 Cassette Loading Mechanism

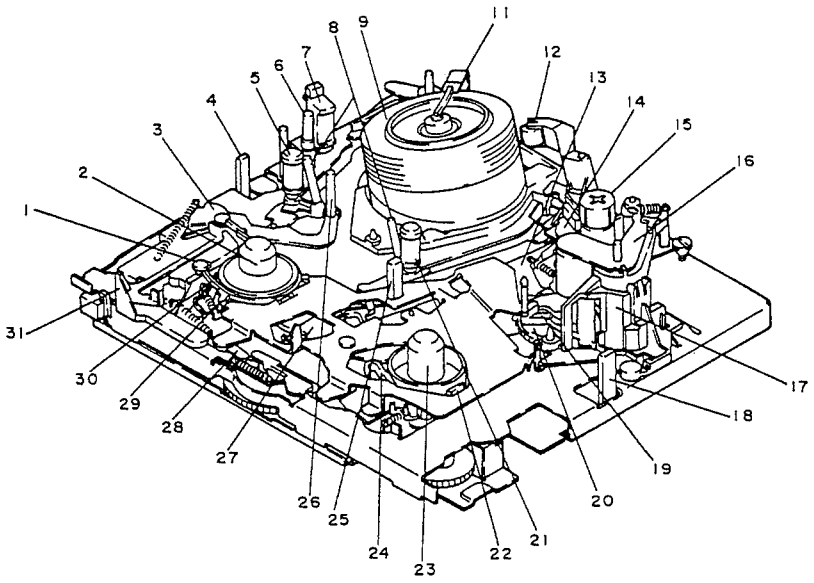


Fig. 4-2 Top View of Mechanism

1. Tension Drive Arm
2. Supply Reel Disk
3. Tension Arm
4. Supply End Sensor
5. Supply Guide Roller
6. Supply Guide Pole
7. Full Erase (FE) Head
8. Inclined Guides
9. Cylinder Motor Assembly
10. ———
11. Static Discharge Brush
12. Head Cleaning Arm Assembly
13. Fine Slow Brake Arm
14. Audio/Control (A/C) Head
15. Capstan Shaft Holder
16. Pressure Roller Assembly
17. Cassette Lid Opener
18. Take-up End Sensor
19. Middle Pole
20. Pressure Roller Drive Gear
21. Take-up Guide Roller
22. Take-up Sub Brake
23. Take-up Reel Disk
24. Take-up Main Brake
25. End LED
26. Tension Pole
27. Torque Change Arm
28. Supply Main Brake
29. Supply Sub Brake
30. Tension Band Assembly
31. Safety Arm

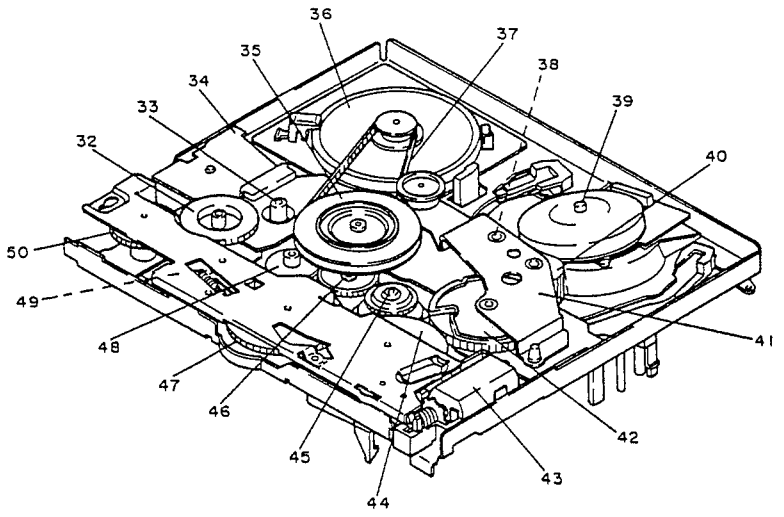


Fig. 4-3 Bottom View of Mechanism

32. FL Relay Gear (B)
33. FL Relay Gear (A)
34. Sensor Circuit Board
35. Centre Pulley
36. Capstan Motor Assembly
37. Drive Belt
38. Take-up Loading Gear
39. Cylinder Motor Assembly
40. Supply Loading Gear
41. Roller Plate
42. Mode Gear
43. Loading Motor
44. Cam Gear (A)
45. Reel Gear (L)
46. Reel Drive Idler
47. Cam Gear (B)
48. Reel Gear (R)
49. Latch Arm
50. FL Relay Gear (C)

Be sure to remove cases, etc. before servicing the mechanism and replacing components, otherwise, the cases, etc. could be damaged.
(Procedure of disassembly)
Remove the parts in the order of letters (A,B,C ···) shown in the illustrations.
(Procedure of reinstallation)
Reinstall the parts by the reverse procedure to removal when no special cautions are given.

5. CASSETTE LOADING MECHANISM REMOVAL

1. Cassette Loading Mechanism

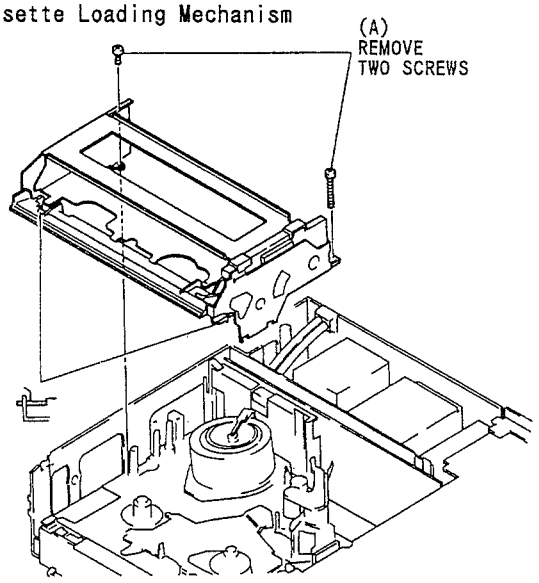


Fig. 5-1

2. Side Gear Bracket, Chassis Holder, FL Drive Arm, Cassette Holder Assembly and Front Holder

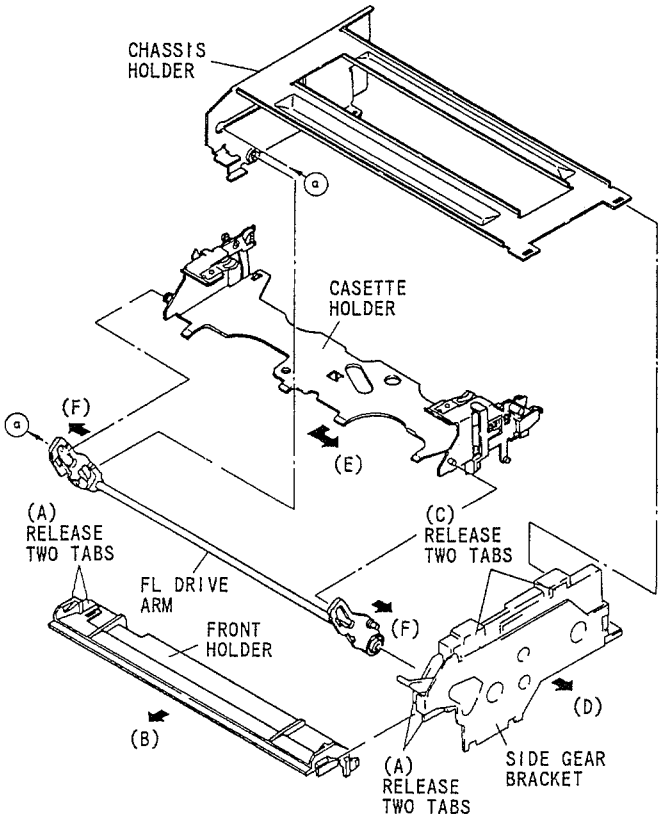


Fig. 5-2

◆ Cautions when reinstalling

1) Check the insertions of 6 bosses.

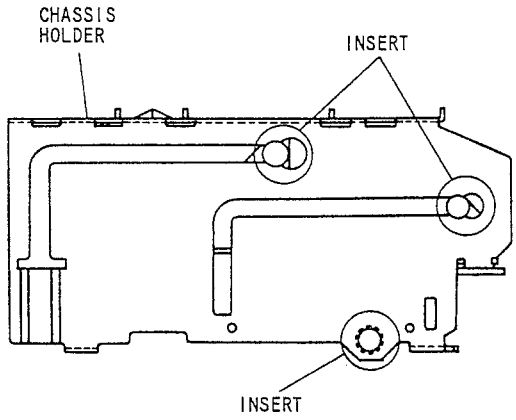


Fig. 5-3

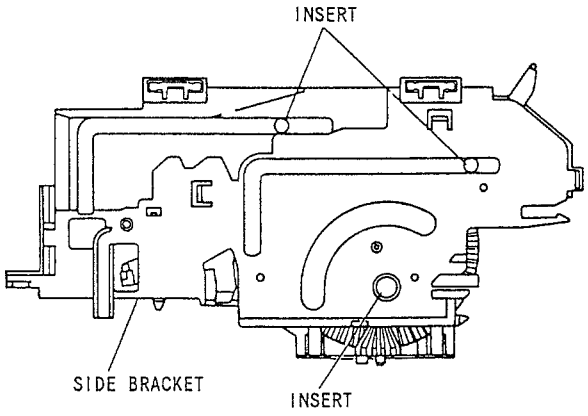


Fig. 5-4

3. Gear Bracket, Door Arm, FL Gears (A), (B) and Switch Arm

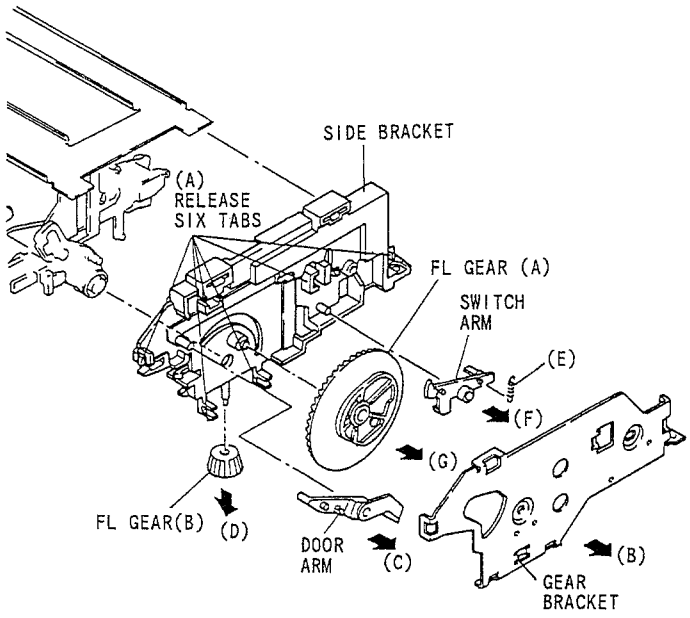


Fig. 5-5

◆ Cautions when reinstalling
1) When reinstalling FL gear (A), align the hole in FL gear (A) and the hole in the side bracket.

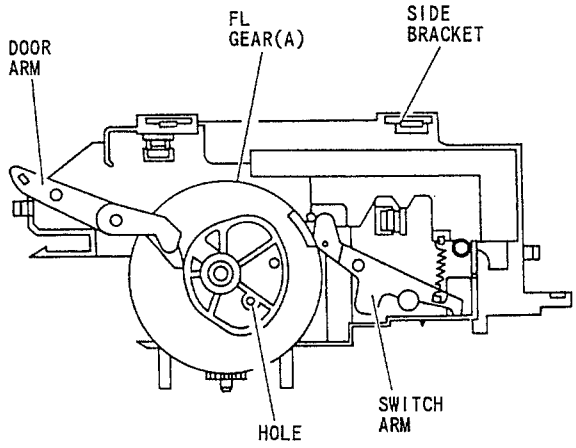


Fig. 5-6

6. MAIN MECHANICAL COMPONENTS REMOVAL

1. FE (Full Erase) Head

◆ Caution when reinstalling
1) Keep the surface of the FE head and supply guide pole which is in contact with the tape clean.

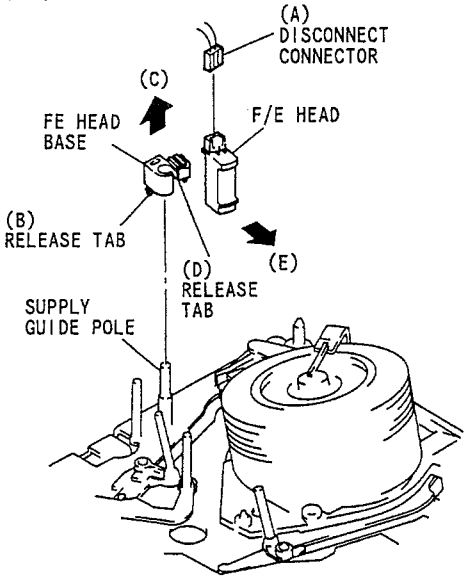


Fig. 6-1

2. A/C (Audio/Control) Head

◆ Cautions when reinstalling
1) Hook the bottom of the spring under the head base to the chassis and the top to the stopper of the head base.
2) Keep the surface of the A/C head which is in contact with the tape clean.

◆ Adjustments after reinstalling
1) A/C (Audio/Control) Head Adjustment
2) X-Value Adjustment
3) Audio Bias Level Adjustment

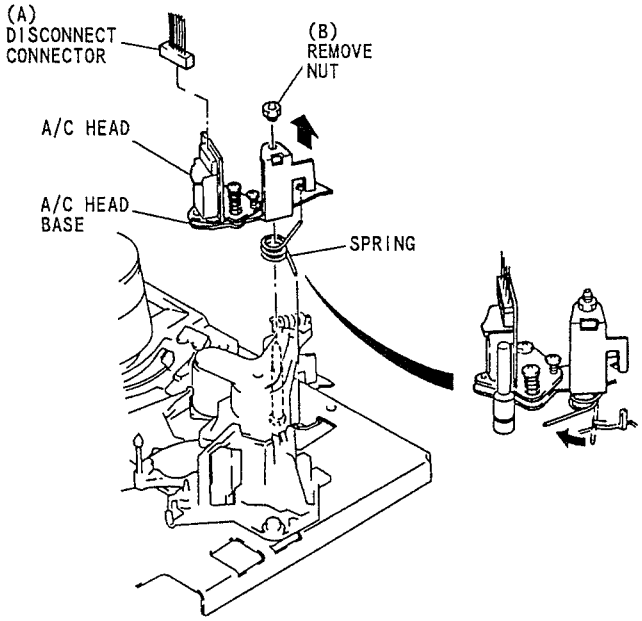


Fig. 6-2

3. Upper Cylinder (Video Heads) and Head Cleaning Bracket Assembly

◆ Cautions during work
1) Pull out the upper cylinder vertically to the cylinder attachment direction.
2) Do not touch video head tips.

◆ Cautions when reinstalling
1) Put the hole in the upper cylinder onto the pole of the lower cylinder.
2) Tighten the two upper cylinder retaining screws alternately.

◆ Adjustment after reinstalling
1) Adjustment after replacing the cylinder (video heads).
2) Head Switching Point Adjustment.

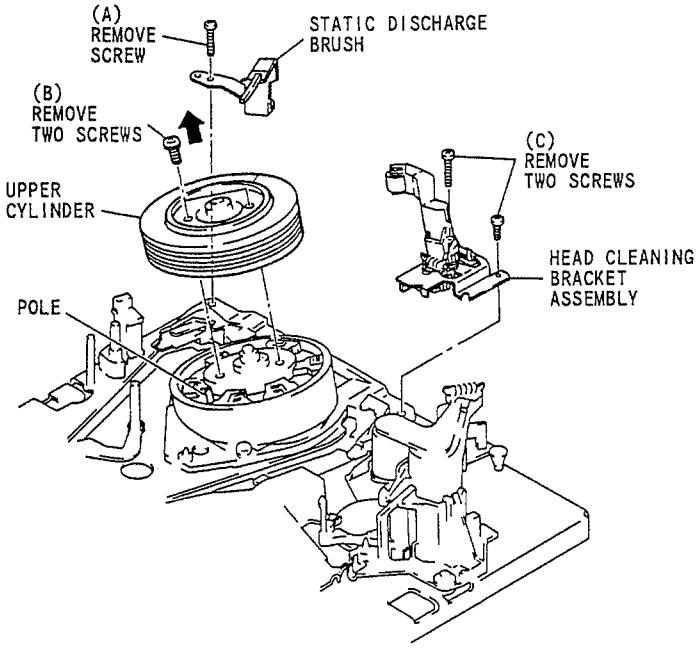


Fig. 6-3

4. Cylinder Motor Assembly

◆ Cautions during work
1) Place the side of the unit down for working.
2) Do not touch video head tips.

◆ Adjustment after reinstalling
1) Adjustment after replacing the cylinder (video heads).

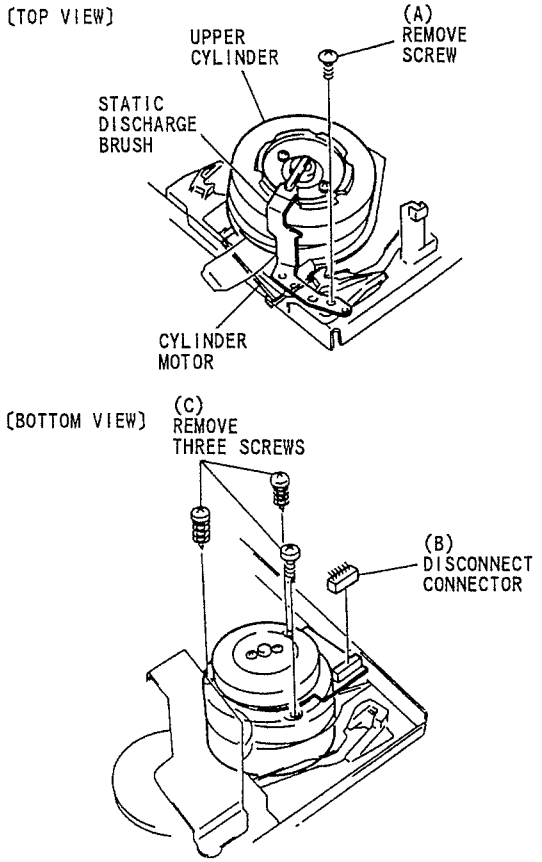


Fig. 6-4

5. Capstan Motor Assembly

◆ Components to remove previously
1) Remove the drive belt.

◆ Caution when reinstalling
1) Keep the surface of the capstan shaft which is in contact with the tape clean.

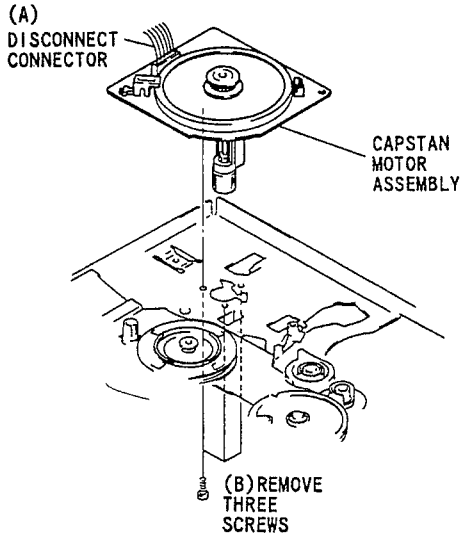


Fig. 6-5

6. Tension Band/ Tension Arm/ Tension Drive Arm

◆ Caution when reinstalling
1) Keep the surface of the tension pole which is in contact with the tape clean.
2) Insert the boss of this arm into the groove in cam gear (A). (See Fig. 6-7)

◆ Adjustments after reinstalling
1) Tension Pole Position and Tension Adjustment

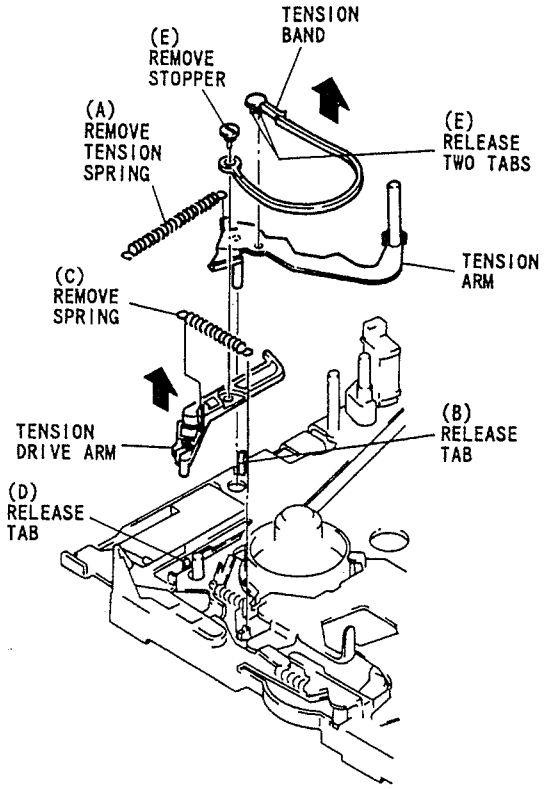


Fig. 6-6

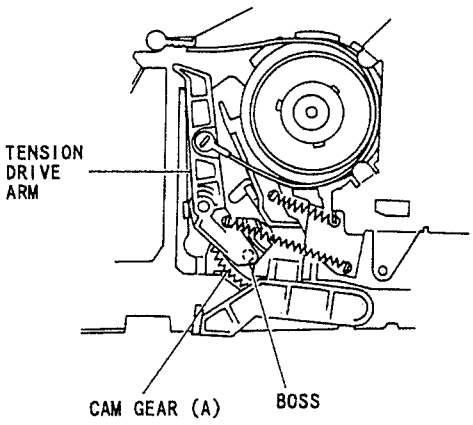


Fig. 6-7

7. Safety Arm

◆ Components to remove previously
1) Tension Band/Tension Arm/Tension Drive Arm (Item 6-6)

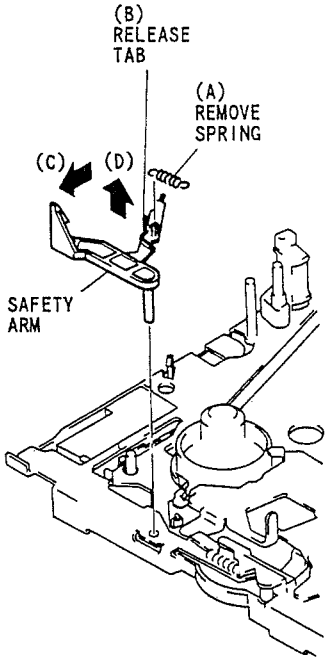


Fig. 6-8

8. Upper Plate, Torque Change Arm, Supply/Take-up Main Brakes
Note: Refer to item 23 on page 2-14 for the procedure to install the torque arm.

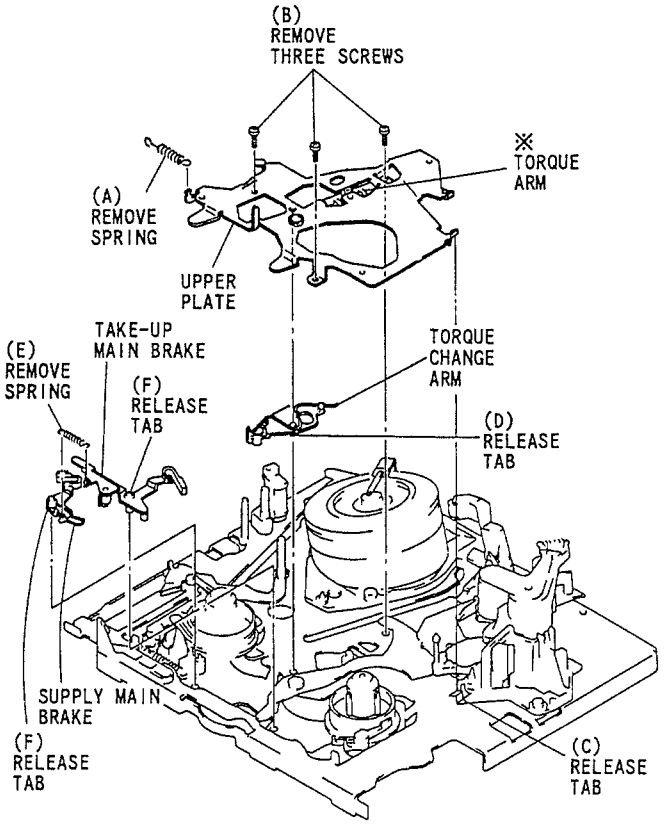


Fig. 6-9

9. Supply/Take-up Reel Disks, Supply/Take-up Sub Brakes

◆ Components to remove previously
1) Upper Plate, Supply/Take-up Main Brakes (Item 6-8)
2) Tension Arm/Tension Band Assembly (Item 6-6)

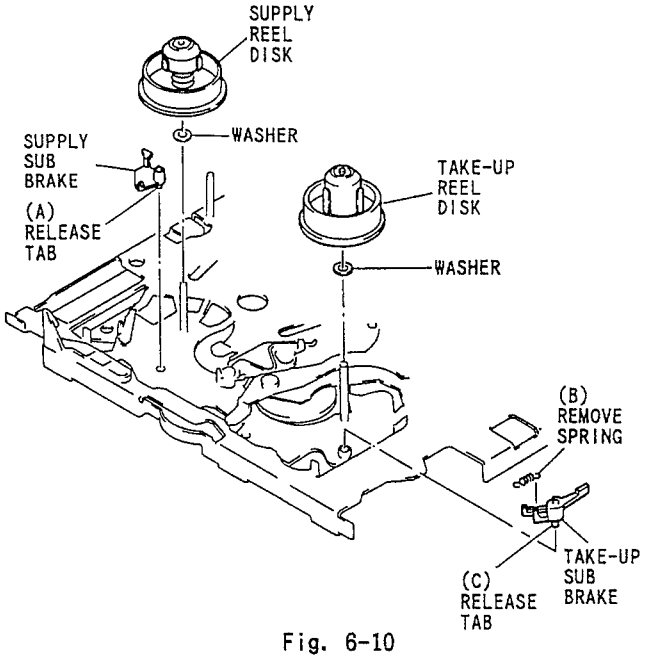


Fig. 6-10

10. Pressure Roller Assembly

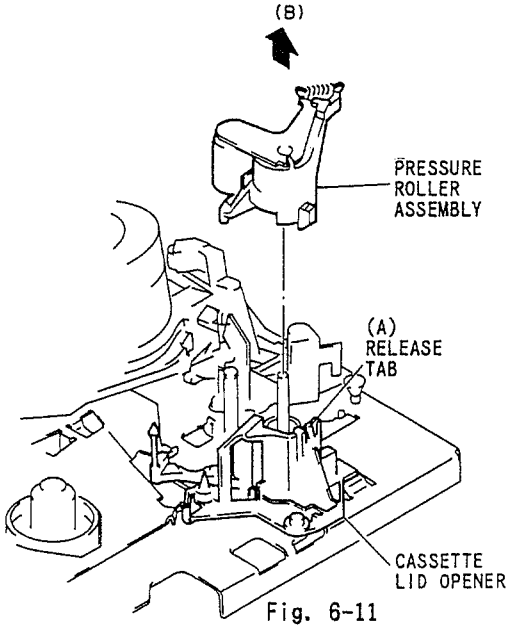


Fig. 6-11

11. Pressure Roller Cam Gear, Cassette Lid Opener and Middle Pole

◆ Components to remove previously
1) Pressure Roller Assembly (Item 6-10)
◆ Caution when reinstalling
1) Keep the surface of the middle pole which is in contact with the tape clean.
2) Hook the spring between the middle pole and chassis.
3) Align mark (○) on the pressure roller cam gear and mark (△) on the pressure roller drive gear. (See Fig. 6-15)

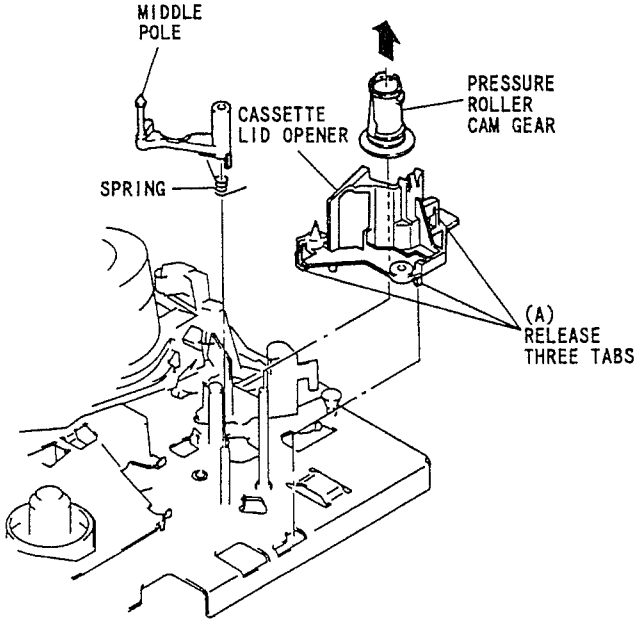


Fig. 6-12

12. Pressure Roller Drive Gear

◆ Components to remove previously
1) Upper Plate (Item 6-8)
2) Pressure Roller Assembly (Item 6-10)
3) Pressure Roller Cam Gear, Cassette Lid Opener and Middle Pole (Item 6-11)

◆ Caution when reinstalling
1) Align hole (A) in the pressure roller drive gear and the hole in the chassis. Also align the markings on the pressure roller drive gear and arm.

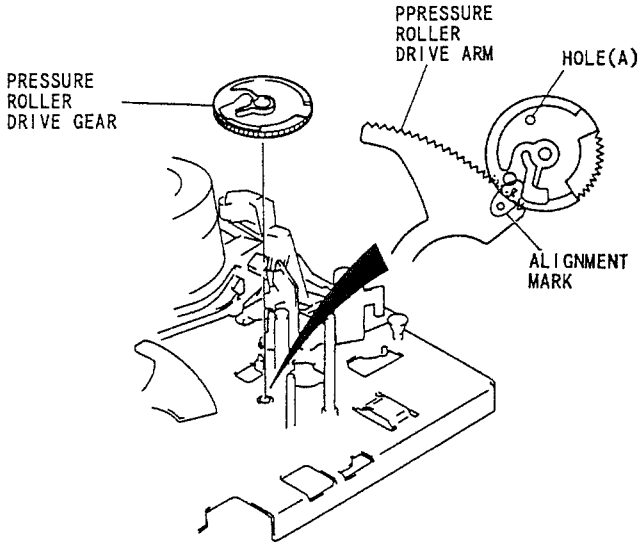


Fig. 6-13

13. Pressure Roller Drive Arm and Fine Slow Brake Arm

◆ Components to remove previously
1) Head Cleaning Bracket Assembly (Item 6-3)
2) Upper Plate (Item 6-8)

◆ Caution when reinstalling
1) Check that the boss of the pressure roller drive arm is securely inserted into the groove in cam gear (B). (See Fig. 6-15)
2) Align hole (A) in the pressure roller drive arm and the hole in the chassis. (See Fig. 6-15)

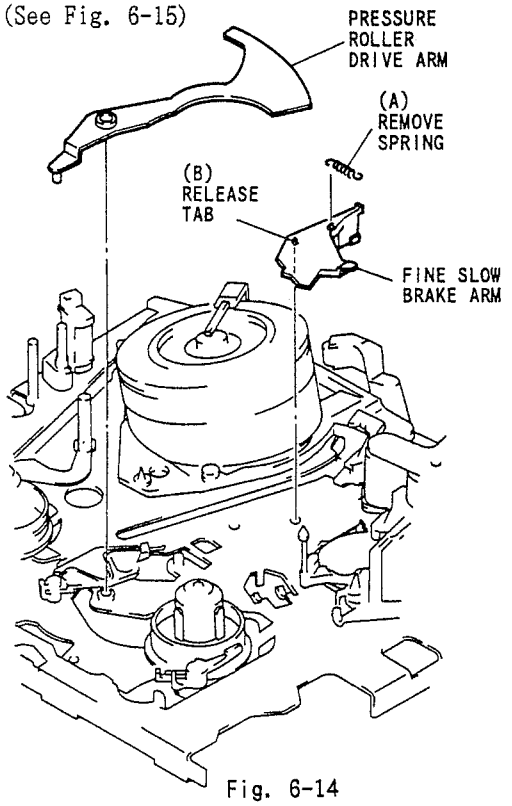


Fig. 6-14

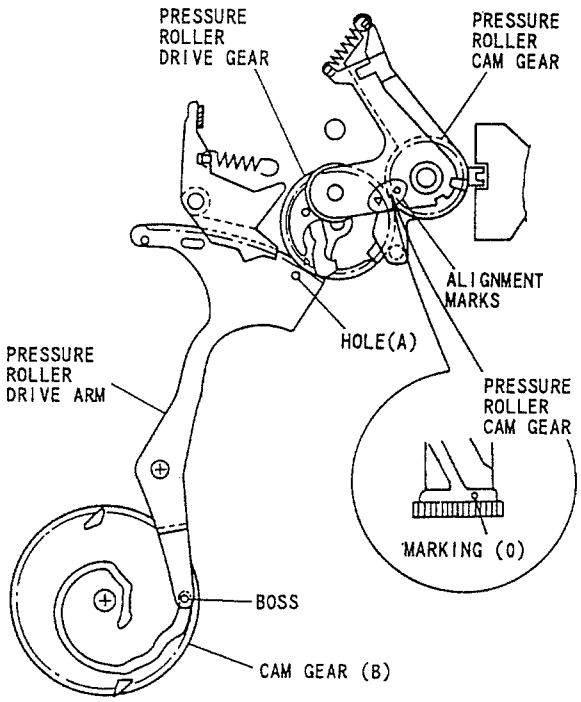


Fig. 6-15

14. Supply/Take-up Guide Rollers

◆ Caution when reinstalling
1) Keep the surface of the guide roller which is in contact with the tape clean.

◆ Adjustments after reinstalling
1) Guide Roller Height Adjustment

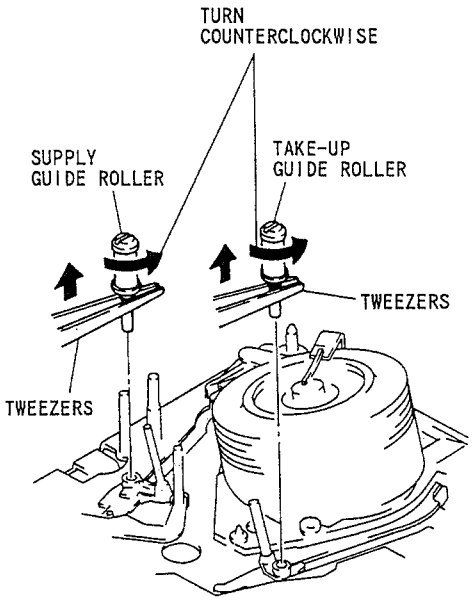


Fig. 6-16

15. Cylinder Motor Base

◆ Components to remove previously
1) Head Cleaning Bracket Assembly (Item 6-3)
2) Cylinder Motor Assembly (Item 6-4)

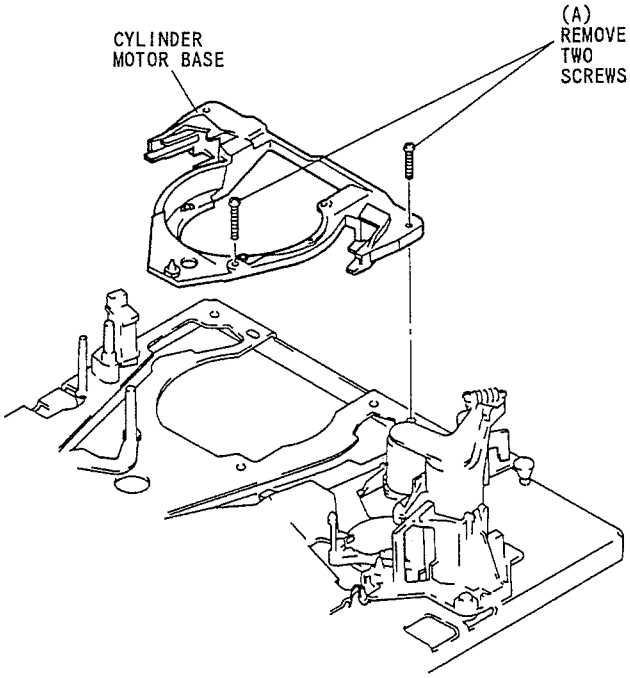


Fig. 6-17

16. Centre Pulley, FL Relay Gear (B)

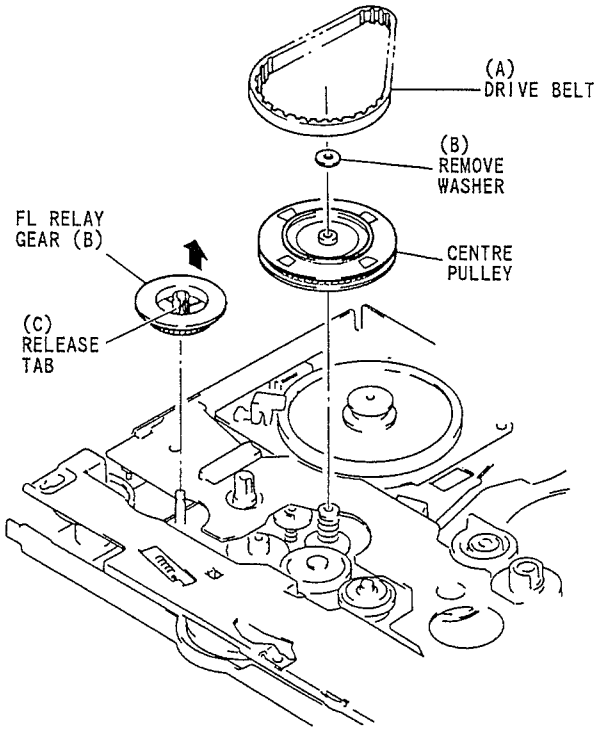


Fig. 6-18

17. Reel Drive Idler, Reel Gears -(L)/(R)

◆ Components to remove previously
1) Centre Pulley (Item 10-16)

◆ Caution when reinstalling
1) Install the spring between the idler and washer.

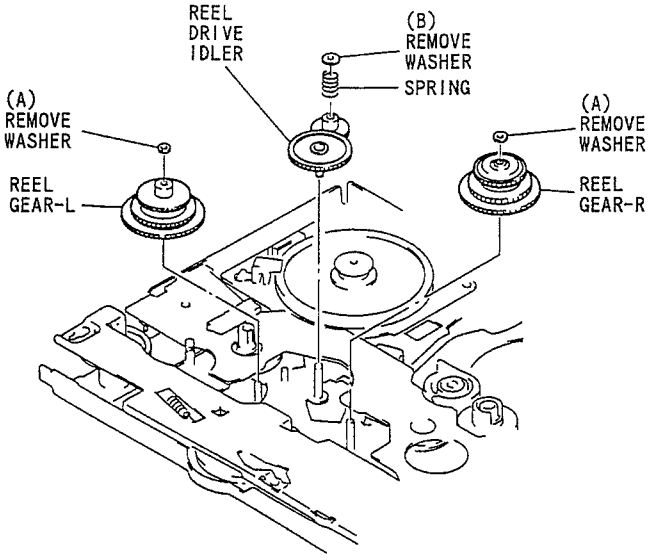


Fig. 6-19

18. Roller Plate, Mode Gear

◆ Caution when reinstalling

1) Align mark (G) on cam gear-A and mark (F) on the mode gear. (See Fig. 6-23)
2) Align the arrow on the sensor P.C.B and arrow (No.1) on the mechanism state switch. (See Fig. 6-23)
3) With the above conditions, align mark (B) on the mechanism state switch and mark (C) on the mode gear. (See Fig. 6-23)

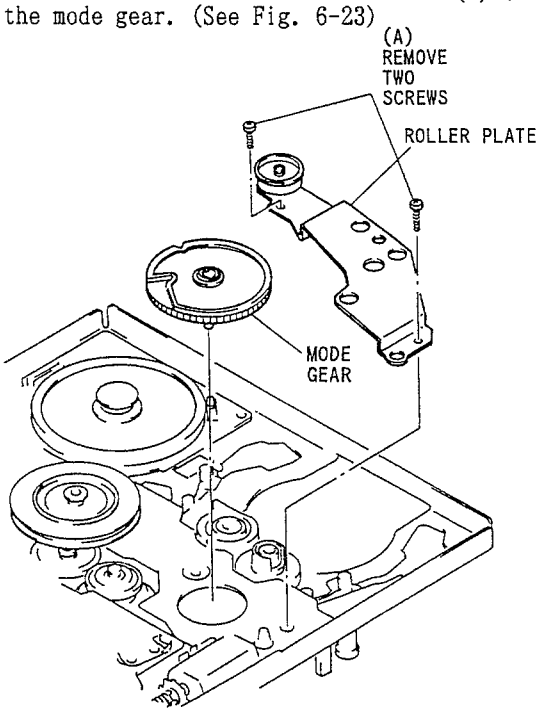


Fig. 6-20

19. Gear Plate, Relay Gear, Wheel Gear, Take-up Brake Sub Arm, Latch Arm, Relay Gear -(C), Cam Gears (A)/(B)

◆ Caution when reinstalling

1) Align hole (A) in the cam gear-(A) and the hole in the chassis.
Also align mark (G) on the cam gear-(A) and mark (F) on the mode gear. (See Fig.6-23)
2) Check that the bosses of the supply sub brake and tension drive arm are inserted into the specified positions. (See Fig. 6-22)
3) Align mark (I) in the cam gear-(B) and mark (H) on the cam gear-(A). (See Fig. 6-23)
4) Check that the boss of the pressure roller drive arm is inserted into the groove in the cam gear-(B). (See Fig. 6-22)

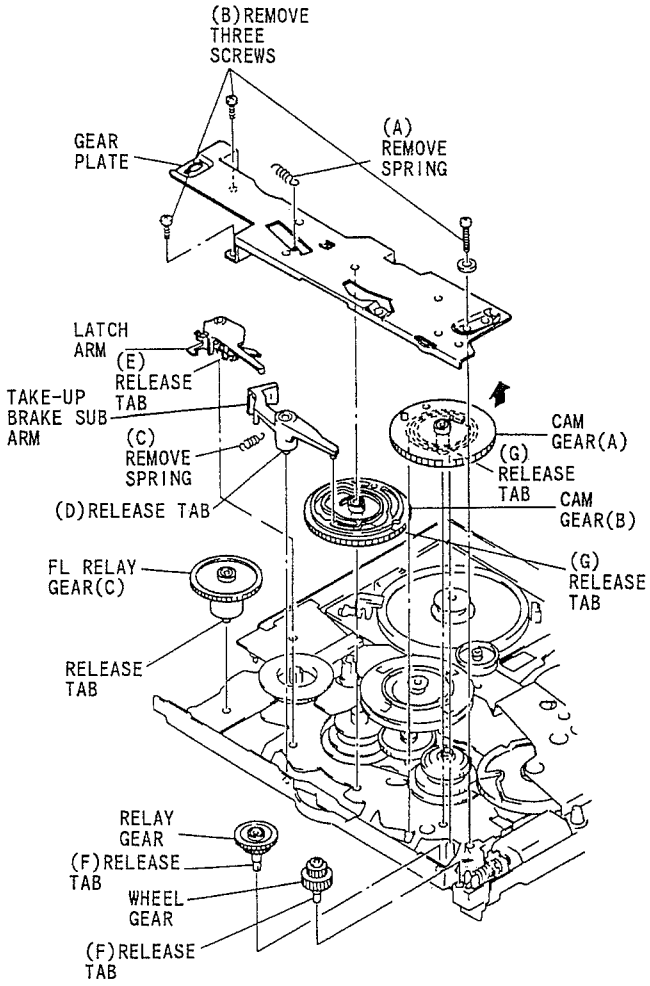


Fig. 6-21

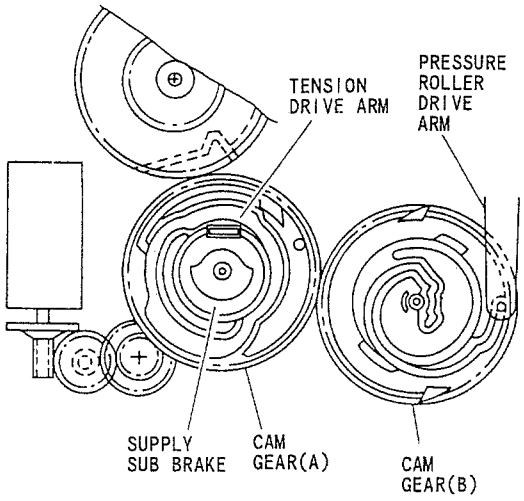


Fig. 6-22

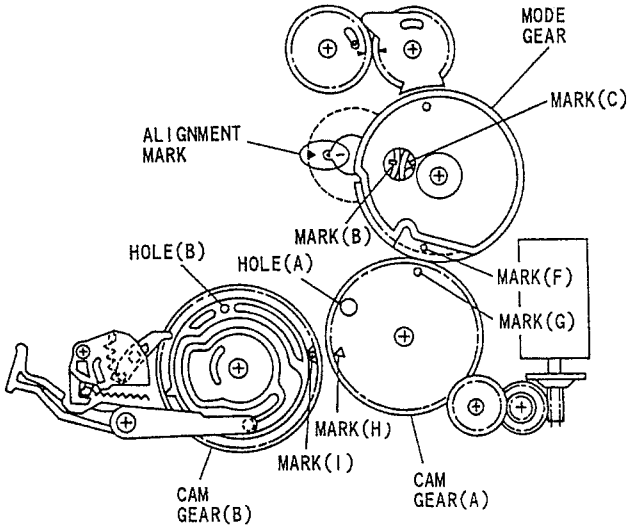


Fig. 6-23

20. Loading Motor Assembly

◆ Components to remove previously
1) FL Relay Gear (B) and Centre Pulley (Item 6-16)
2) Roller Plate, Mode Gear (Item 6-18)
3) Gear Plate, Relay Gear and Wheel Gear (Item 6-19)

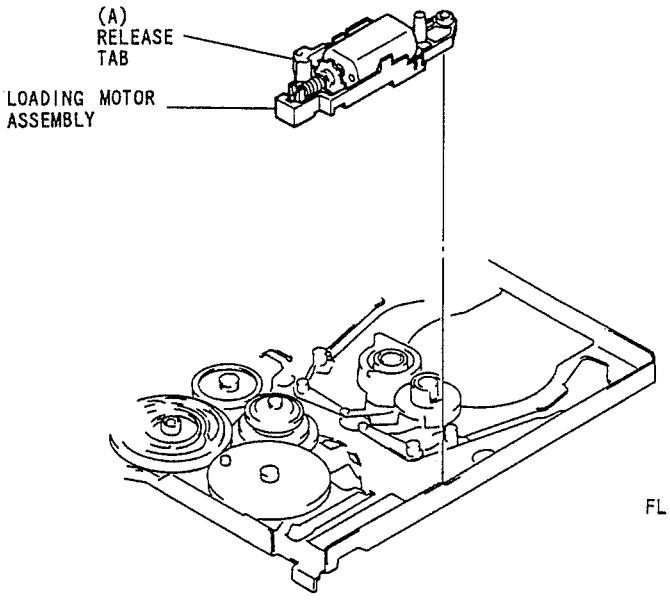


Fig. 6-24

21. FL Relay Gear -(A), FL Change Arm, FL Change Gear

◆ Components to remove previously
1) Roller Plate, Mode Gear (Item 6-18)
2) Centre Pulley, FL Relay Gear (B) (Item 6-16)
3) Sensor P.C.B (Item 3-6)

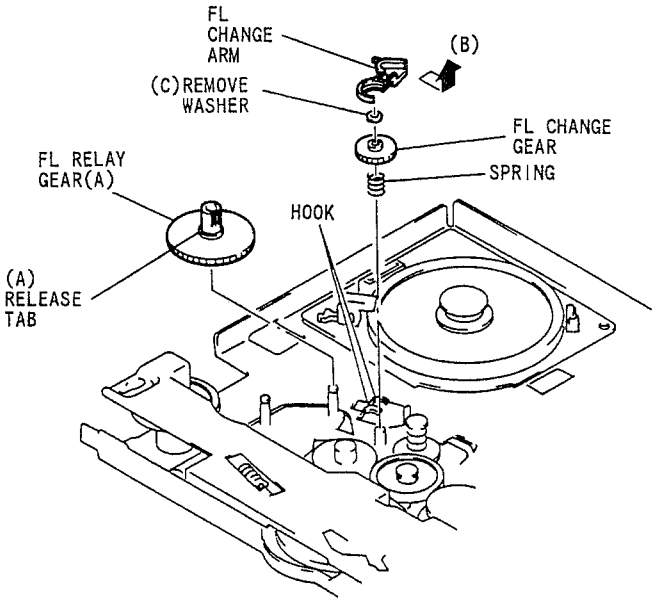


Fig. 6-25

◆ Cautions when reinstalling
Install the FL change arm by the following procedure. Do not narrow the "U"-shaped section of the arm when installing it. (See Fig. 6-26)
1) Place the arm sideways and pass it through the hole in the chassis.
2) Turn the arm to the front (to the right).
3) Push up the whole arm, taking care that section (a) of the arm does not hit the chassis and insert the bosses of the arm into the holes in the axis supports in the chassis.
4) After installing the arm, check that the arm moves smoothly.

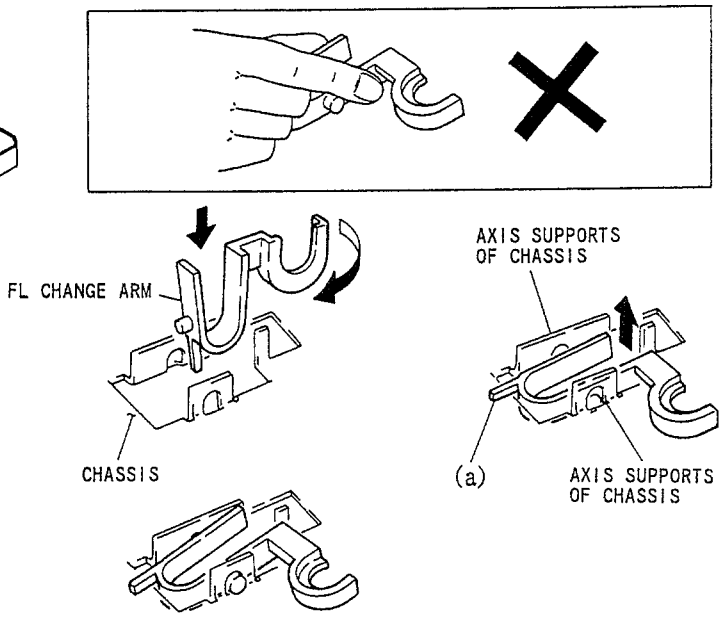


Fig. 6-26

22. Supply/Take-up Loading Arms

◆ Components to remove previously
1) Roller Plate, Mode Gear (Item 6-18)
2) Centre Pulley, FL Relay Gear (B) (Item 6-16)
3) Sensor P.C.B (Item 3-7)

◆ Caution when installation
1) Align the markings on each gear. (See Fig. 6-28)

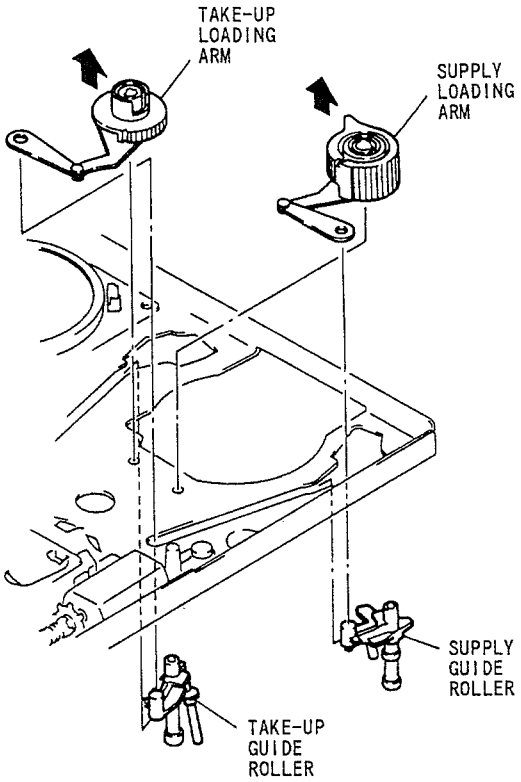


Fig. 6-27

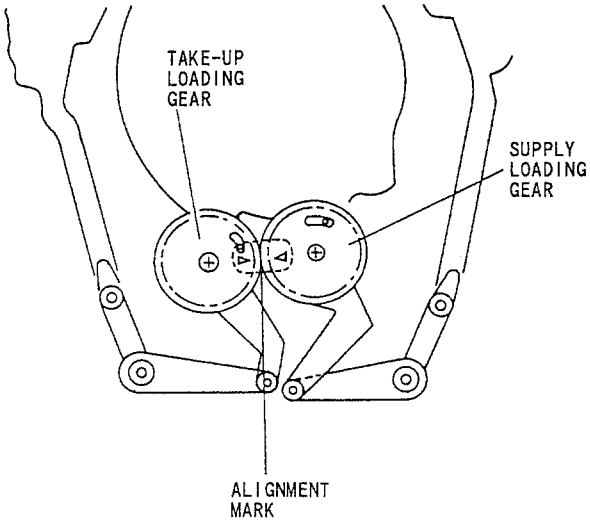


Fig. 6-28

23. Torque Arm Installation Procedure

1) Insert the torque arm as shown in the figure.
2) Fit the torque arm to the upper plate as shown in Fig. 6-29.
3) Install the torque arm into the upper plate while turning the arm in the direction of the arrow.

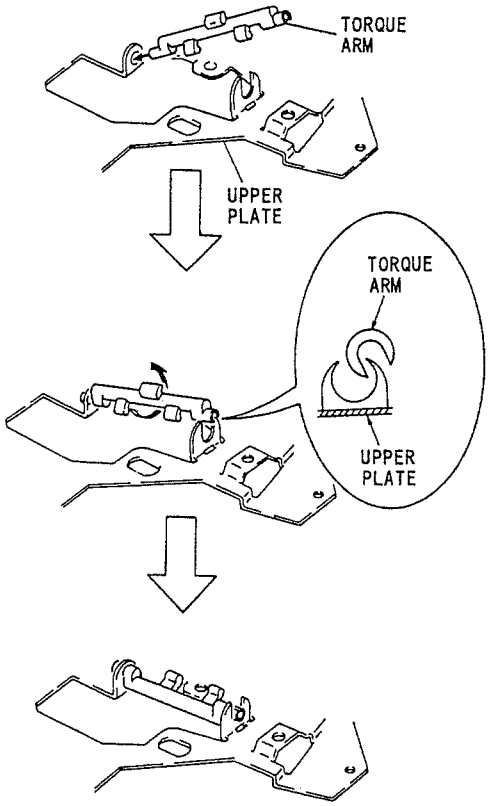


Fig. 6-29

24. Remote Control Hand Unit Cover

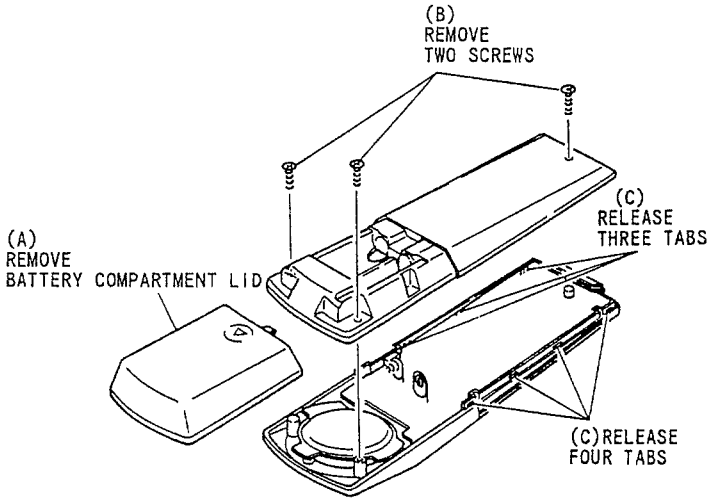


Fig. 6-30

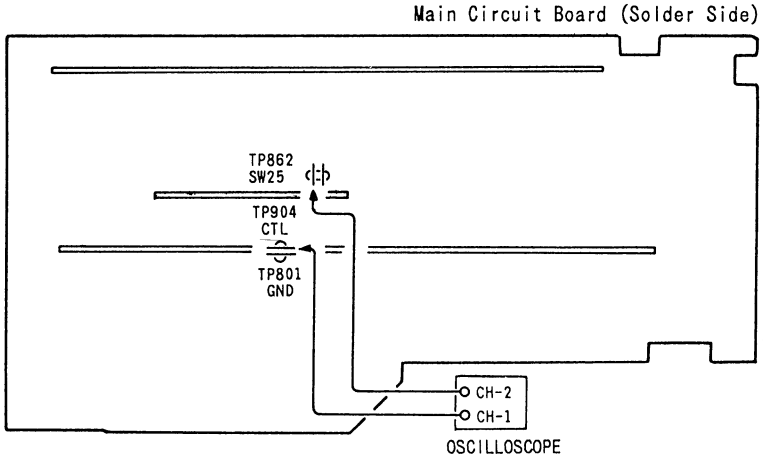
MECHANISM ADJUSTMENT

5. X-Value Adjustment [Except for UKN]

Purpose: To obtain compatibility with other VCRs.

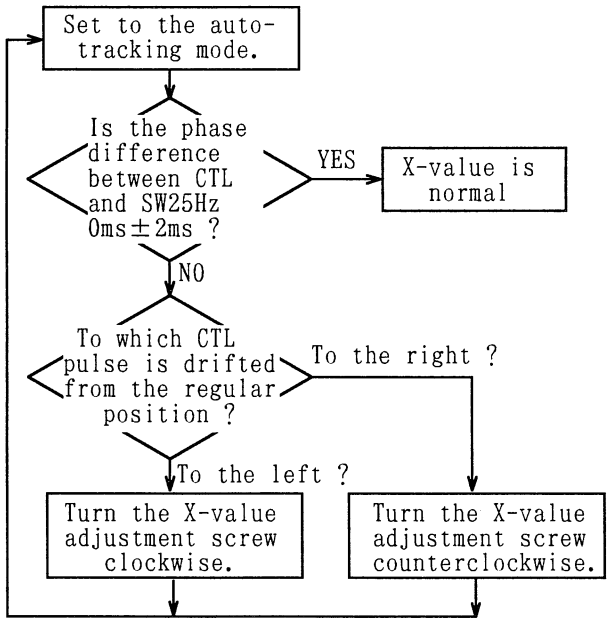
Test equipment/jig	Test Equipment Connection Points	State of VCR	Adjustment point
• Oscilloscope	• CH-1: TP904 (CTL PULSE) • CH-2: TP862 (SW25Hz)	• Play alignment tape (Stairsteps section)	• X-value adjustment screw
• Alignment tape (MH-2) (Parts No. 7099052)	———		

Connection diagram

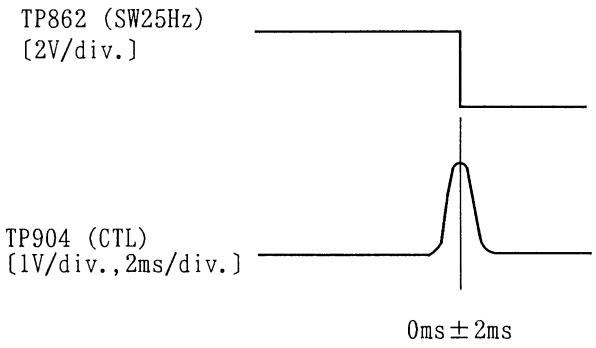


Adjustment procedure

Adjust so that the phase difference between the CTL pulse (positive pulse) and the SW25Hz signal is 0ms±2ms when the autotracking function operates.


Set to the auto-tracking mode.
Is the phase difference between CTL and SW25Hz 0ms±2ms ?
YES
X-value is normal
NO
To which CTL pulse is drifted from the regular position ?
To the right ?
To the left ?
Turn the X-value adjustment screw clockwise.
Turn the X-value adjustment screw counterclockwise.

Waveforms

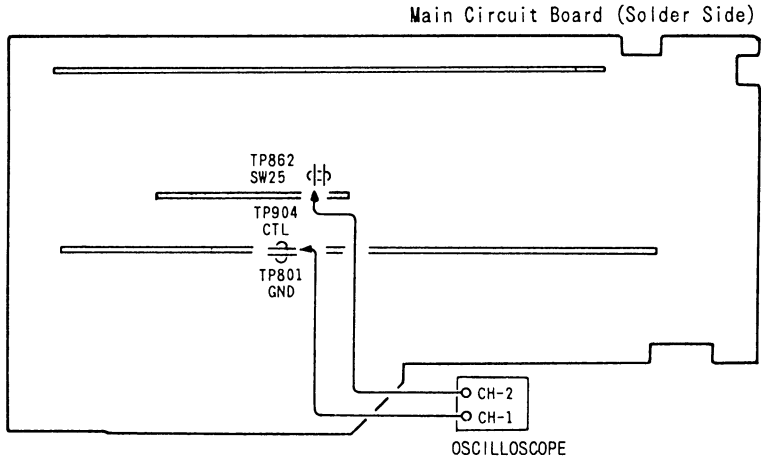


5. X-Value Adjustment [For UKN]

Purpose: To obtain compatibility with other VCRs.

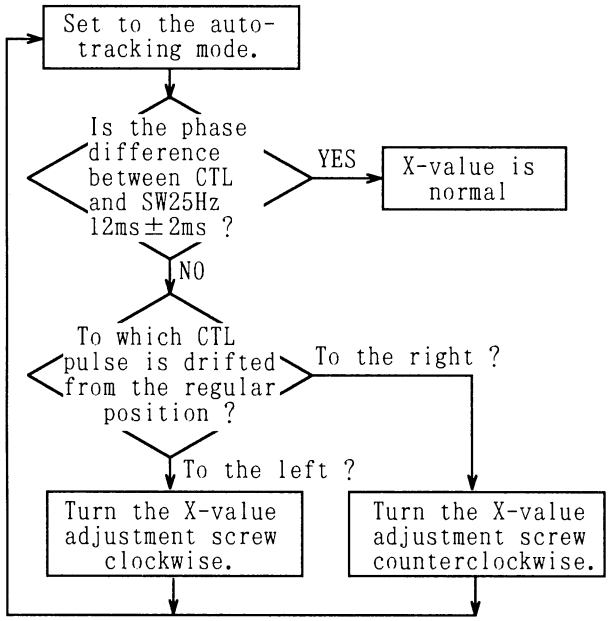
Test equipment/jig	Test Equipment Connection Points	State of VCR	Adjustment point
• Oscilloscope	• CH-1: TP904 (CTL PULSE) • CH-2: TP862 (SW25Hz)	• Play alignment tape (Stairsteps section)	• X-value adjustment screw
• Alignment tape (MH-2) (Parts No. 7099052)	———		

Connection diagram

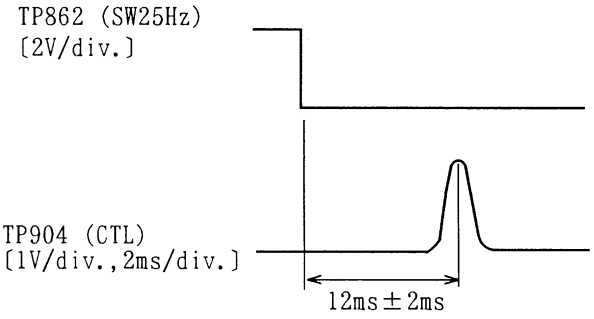


Adjustment procedure

Adjust so that the phase difference between the CTL pulse (positive pulse) and the SW25Hz signal is 12ms±2ms when the autotracking function operates.


Set to the auto-tracking mode.
Is the phase difference between CTL and SW25Hz 12ms±2ms ?
YES
X-value is normal
NO
To which CTL pulse is drifted from the regular position ?
To the right ?
To the left ?
Turn the X-value adjustment screw clockwise.
Turn the X-value adjustment screw counterclockwise.

Waveforms



ELECTRIC CIRCUIT ADJUSTMENT

Test equipment and tapes necessary for adjustment

1) Dual-trace oscilloscope
2) Colour bar generator
3) VTVM
4) DC voltmeter
5) Frequency counter
6) Monitor TV
7) CR Oscillator
8) Alignment tape
   - MH-2 : Parts No. 7099052

   Hi-Fi Alignment tape
   - 36HMAFE-3-1 : Parts No. 7099175
9) Blank tape

Cautions on adjustments

1) If there are no special instructions, the following conditions apply.
   - Oscilloscope probe: 10:1
   - Oscilloscope synchronization: Internal sync
   - Earth of test equipment: TP801 (GND) on Main P.C.B
   - Tracking control: Electrical centre (Press the TRACKING UP (▲) and DOWN (▼) buttons simultaneously to set tracking to the centre.)
   - Slow tracking control: Electrical centre (Unplug the mains lead from the AC outlet)
2) When making more than one adjustment, perform the adjustments in the order listed.

Servicing positions

The circuit boards can be set to the servicing positions as follows when servicing and adjusting the VCR.

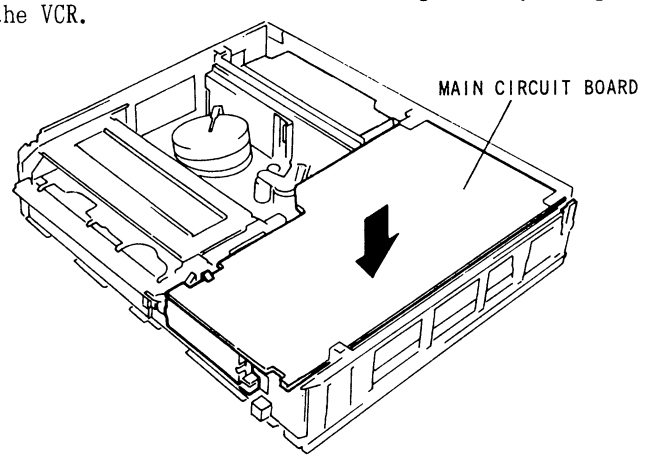


Fig. 1

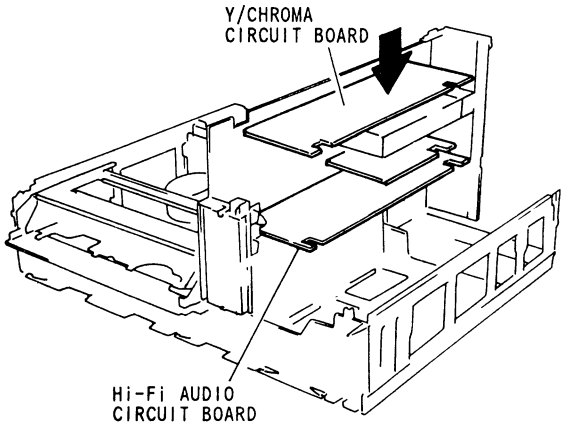
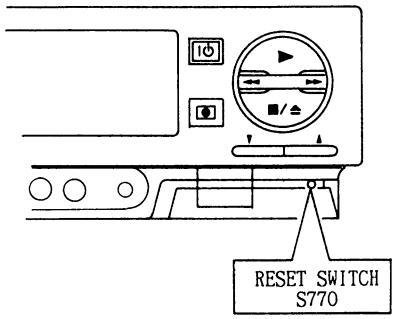


Fig. 2

Usable servicing methods

1. Resetting the microprocessors

   The microprocessors used in this unit can be reset by pressing switch (S770) on the Function SW Circuit Board.



2. To set the VCR to the loading state without loading a cassette

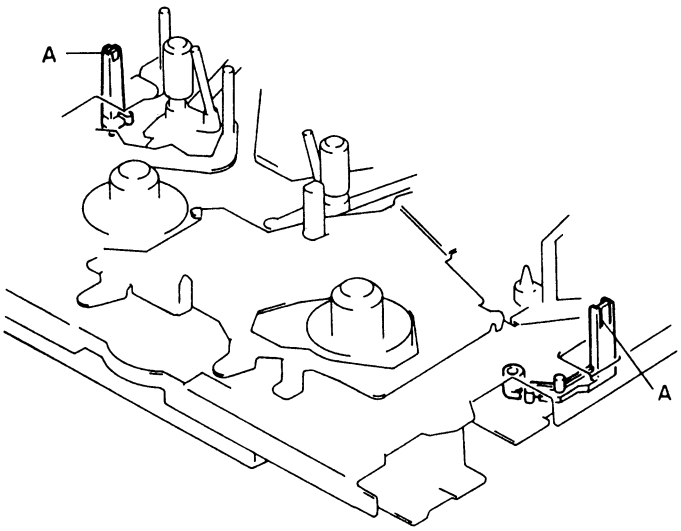
1) Unplug the mains lead from the AC outlet.
2) Cover the supply and take-up end sensors (sections A in the figure below) with black masking tape, etc. to shut off the light.
3) Plug the mains lead into an AC outlet.
4) Turn the VCR on.

   The VCR can accept the inputs of each mode in this state. However, the rewind operation cannot be performed for more than a few seconds because the take-up reel disk is in the stop state and reel pulses cannot be detected.

[Cautions]

Always return the VCR to the original state in the following order after the above operations have been completed.

1) Remove the masking tape, etc. from the supply and take-up end sensors.
2) Unplug the mains lead from the AC outlet once to reset the system control microprocessor.



Adjustment Parts Locations

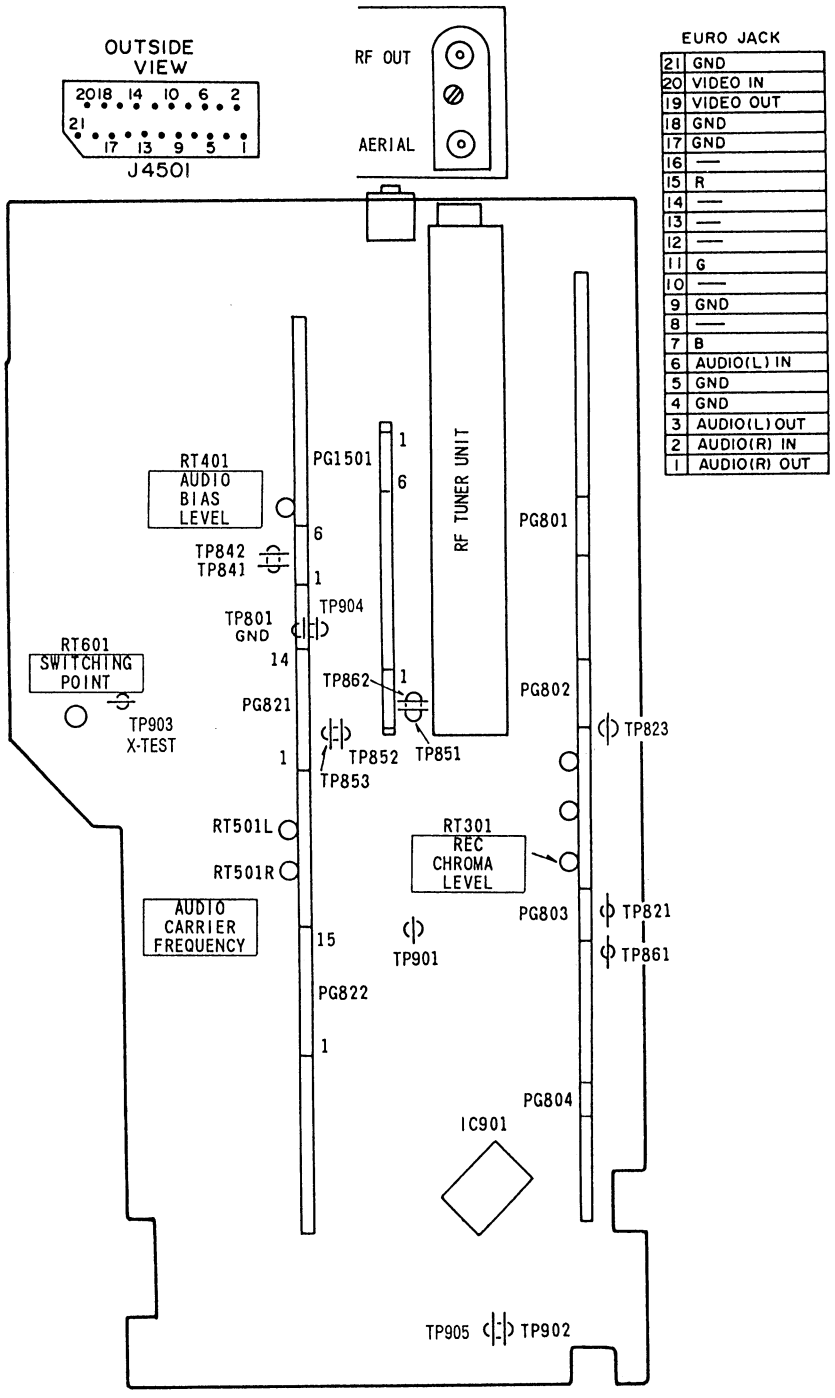


Fig. 1 Main Circuit Board (Solder Side)

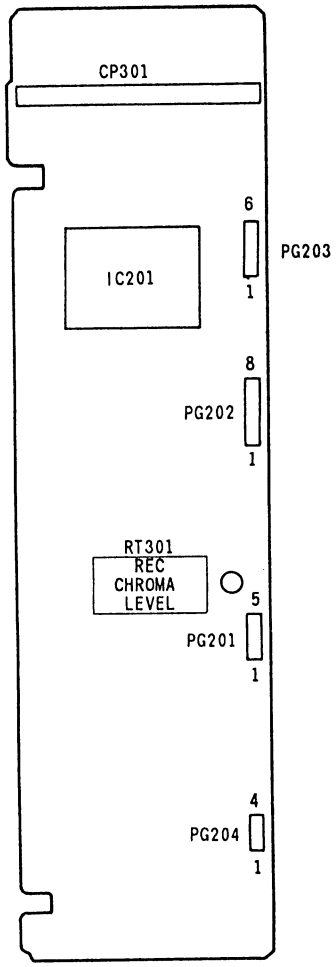


Fig. 2 Y/Chroma Circuit Board (Component Side)

NOTE

※ Be sure to perform the following adjustment after replacing IC903 (EAROM) on the main circuit board.
- Reverse Slow Tracking Preset
- Forward Slow Tracking Preset
- Level Meter Adjustment

1. SERVO CIRCUIT ADJUSTMENTS

1. Head Switching Point Adjustment

Purpose of adjustment and fault occurring if incomplete

Purpose: To set the video head switching point during play to approximately the centre where the CH-1 and CH-2 envelopes overlap each other.

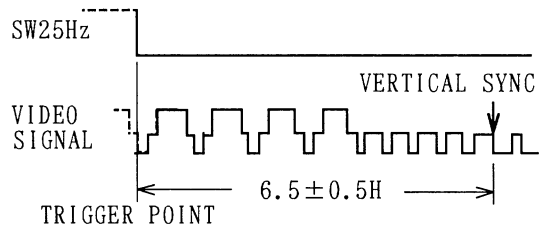
Fault:
- The vertical sync signal is degraded and vertical jitter occurs.
- Switching noise appears across the bottom of the screen.

Test Equipment/Jigs	Test Equipment Connection Points	State of VCR	Adjustment Point
• Oscilloscope • Alignment tape (MH-2) (Parts No.7099052)	• CH-1: VIDEO OUT • CH-2: TP862(SW25Hz)	• Play alignment tape (Stairsteps Section) • Tracking control: Electrical Centre	• RT601 (SWITCHING POINT)

Adjustment Procedure

Vertical sync signal:
Set to 6.5H±0.5H from the trailing edge (trigger position) of the SW25Hz pulse.
<Settings of oscilloscope>
- Trigger with CH-2.
- Set the sync slope to "-".

Waveforms



2. Vert. Sync Adjustment

Purpose of adjustment and fault occurring if incomplete

Purpose: Change timing for adding vertical drive pulse and suppress vertical jitter in picture during still play.

Fault: Vertical jitter occurs during still play.

Test Equipment/Jigs	Test Equipment Connection Points	State of VCR	Adjustment Point
• Monitor TV • Colour bar generator (or receive TV programme) • Blank tape	• RF OUT • VIDEO IN	• Record colour bar signal and play it back with this unit in STILL mode.	• TRACKING UP (Remote control) • TRACKING DOWN (Remote control)

Adjustment Procedure

SP Vert. Sync
1) Tape speed : SP
2) TRACKING BUTTONS : Suppress vertical jitter in picture.

LP Vert. Sync (For UKN)
1) Tape speed : LP
2) TRACKING BUTTONS : Suppress vertical jitter in picture.

3. Slow Tracking Preset Adjustment

Purpose of adjustment and fault occurring if incomplete

Purpose: To adjust the timing to generate a brake pulse for the capstan motor during slow play and minimize noise.

Fault: Noise appears in the slow motion picture which is difficult to see.

Test Equipment/Jigs	Test Equipment Connection Points	State of VCR	Adjustment Point
• Monitor TV • Colour bar generator • Blank tape	• VIDEO OUT or RF OUT • VIDEO IN	• Slow Tracking control: Electrical Centre	• TRACKING UP (Remote control) • TRACKING DOWN (Remote control)

Adjustment Procedure

SP Slow Tracking Preset
1) Tape speed : SP
2) Record colour bar signals for several minutes.
3) Playback the section recorded in step 2).
4) Use a jumper to short TP901 and TP902 so that "<< >>" appears in the display.
5) Press the F.FWD button to set the VCR to the test slow mode.
6) Eliminate the noise from the monitor screen.
7) Remove the short-circuit.

LP Slow Tracking Preset (For UKN)
1) Tape speed : LP
2) Record colour bar signals for several minutes.
3) Playback the section recorded in step 2).
4) Use a jumper to short TP901 and TP902 so that "<< >>" appears in the display.
5) Press the F.FWD button to set the VCR to the test slow mode.
6) Eliminate the noise from the monitor screen.
7) Remove the short-circuit.

4. Reverse Slow Tracking Preset Adjustment

Purpose of adjustment and fault occurring if incomplete	
Purpose: To adjust the timing to generate a brake pulse for the capstan motor during reverse slow play and minimize noise.	Fault: Noise appears in the reverse slow motion picture which is difficult to see.

Test Equipment/Jigs	Test Equipment Connection Points	State of VCR	Adjustment Point
· Monitor TV · Colour bar generator · Blank tape	· VIDEO OUT or RF OUT · VIDEO IN	· Slow Tracking control: Electrical Centre	· TRACKING UP (Remote control) · TRACKING DOWN (Remote control)

Adjustment Procedure

SP Reverse Slow Tracking Preset
1) Tape speed : SP
2) Record colour bar signals for several minutes.
3) Playback the section recorded in step 2).
4) Use a jumper to short TP901 and TP902 so that "<< >>" appears in the display.
5) Press the REV button to set the VCR to the test reverse slow mode.
6) Eliminate the noise from the monitor screen.
7) Remove the short-circuit.

LP Reverse Slow Tracking Preset [For UKN]
1) Tape speed : LP
2) Record colour bar signals for several minutes.
3) Playback the section recorded in step 2).
4) Use a jumper to short TP901 and TP902 so that "<< >>" appears in the display
5) Press the REV button to set the VCR to the test reverse slow mode.
6) Eliminate the noise from the monitor screen.
7) Remove the short-circuit.

2. Y/CHROMA CIRCUIT ADJUSTMENTS

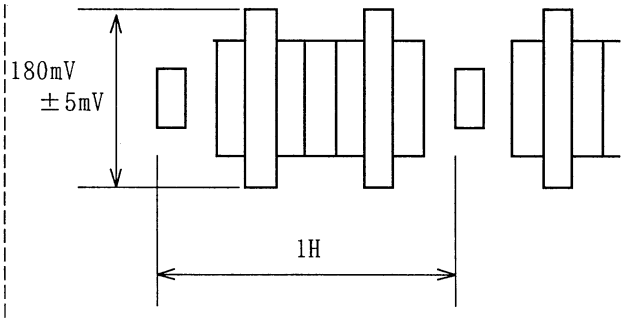
1. REC Chroma Level Adjustment

Purpose of adjustment and fault occurring if incomplete	
Purpose: Set the record chroma levels to the optimum values.	Fault: · Diamond beats occur in the played back picture or colouring becomes poor. · The played back picture becomes dark and noise increases, or the picture glares and becomes whitish.

Test Equipment/Jigs	Test Equipment Connection Points	State of VCR	Adjustment Point
· Oscilloscope · Colour bar generator · Blank tape	· TP821 · VIDEO IN	· REC mode	· RT301 (CHROMA LEVEL)

Adjustment Procedure
1) RT301 : Set the record chroma level to 180±5mVp-p.

Waveforms



3. AUDIO CIRCUIT ADJUSTMENTS

1. Audio Bias Level adjustment

Purpose of adjustment and fault occurring if incomplete	
Purpose: Set audio bias during recording to optimum level.	Fault: · Bias too high: High-frequensy response deteriorates. · Bias too low: Sound tends to be distorted.

Test Equipment/Jigs	Test Equipment Connection Points	State of VCR	Adjustment Point
· VTVM · Blank tape	· TP841 (BIAS) · TP842 (BIAS GND)	· Not-signal recording	· RT401 (BIAS LEVEL)

Adjustment Procedure
RT401: The VTVM reads 3.2mVrms±0.1mVrms.

2. Carrier Frequency Adjustment

Purpose of adjustment and fault occurring if incomplete Purpose: Set the audio carrier frequency to the specified value.		Fault: • Compatibility with tapes recorded by another VCR cannot be obtained. • Hi-Fi audio is not played back.	
Test Equipment/Jigs	Test Equipment Connection Points	State of VCR	Adjustment Point
• Frequency counter	• TP852 (when adjusting RT501L) • TP853 (when adjusting RT501R)	• No-signal record mode (SP mode)	• RT501L (L-CH) • RT501R (R-CH) (CARRIER FREQUENCY)
• Blank tape			
Adjustment Procedure 1) RT501L : The frequency counter reads 1400kHz±4kHz at TP852. 2) RT501R : The frequency counter reads 1800kHz±4kHz at TP853.			

4. TIMER CIRCUIT ADJUSTMENT

1. Level Meter Adjustment

Purpose of adjustment and fault occurring if incomplete Purpose: To make the level meter operate correctly.		Fault: The level meter does not operate normally.	
Test Equipment/Jigs	Test Equipment Connection Points	State of VCR	Adjustment Point
• CR oscillator	• AUDIO IN-(L)/(R)	• AUX mode • E-E mode	• STOP button
• VTVM	• AUDIO OUT-(L)/(R)		
Adjustment Procedure 1) Connect a VTVM to the AUDIO OUT-(L)/(R) jacks. 2) Connect a CR oscillator to the AUDIO IN-(L)/(R) jacks. 3) Adjust the audio output of the CR oscillator so the VTVM reads +0.7 to +1.7dBs. (The frequency should be 1kHz.) 4) Short-circuit between TP901 and TP902 on the main circuit board so that "<< >>" appears in the display.		5) Press and hold the STOP button (for more than 1 second) and check that the 0dB segments of the level meter light. 6) If the above cannot be confirmed, perform readjustment and then check IC903 (EAROM).	

CHAPTER 5

SCHEMATIC DIAGRAMS & CIRCUIT BOARD DIAGRAMS

MODEL : VT-F350E Series

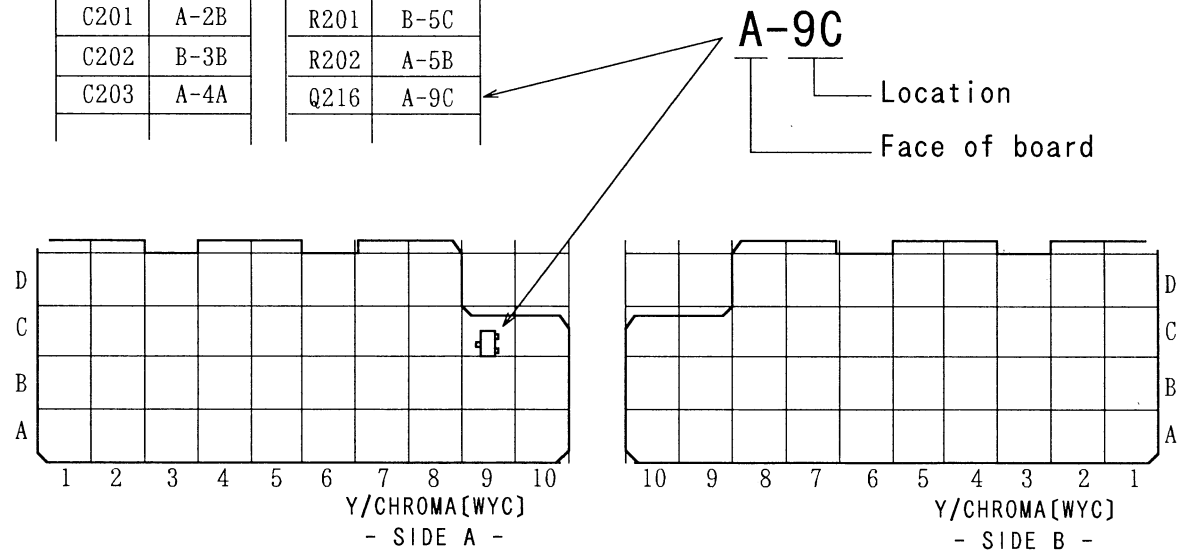
【Parts Location Indexing Tables】

This service manual shows the parts location indexing tables beside the major circuit board diagrams. These tables indicate the locations of each part on the circuit boards. Use the tables to locate the parts on the circuit boards.

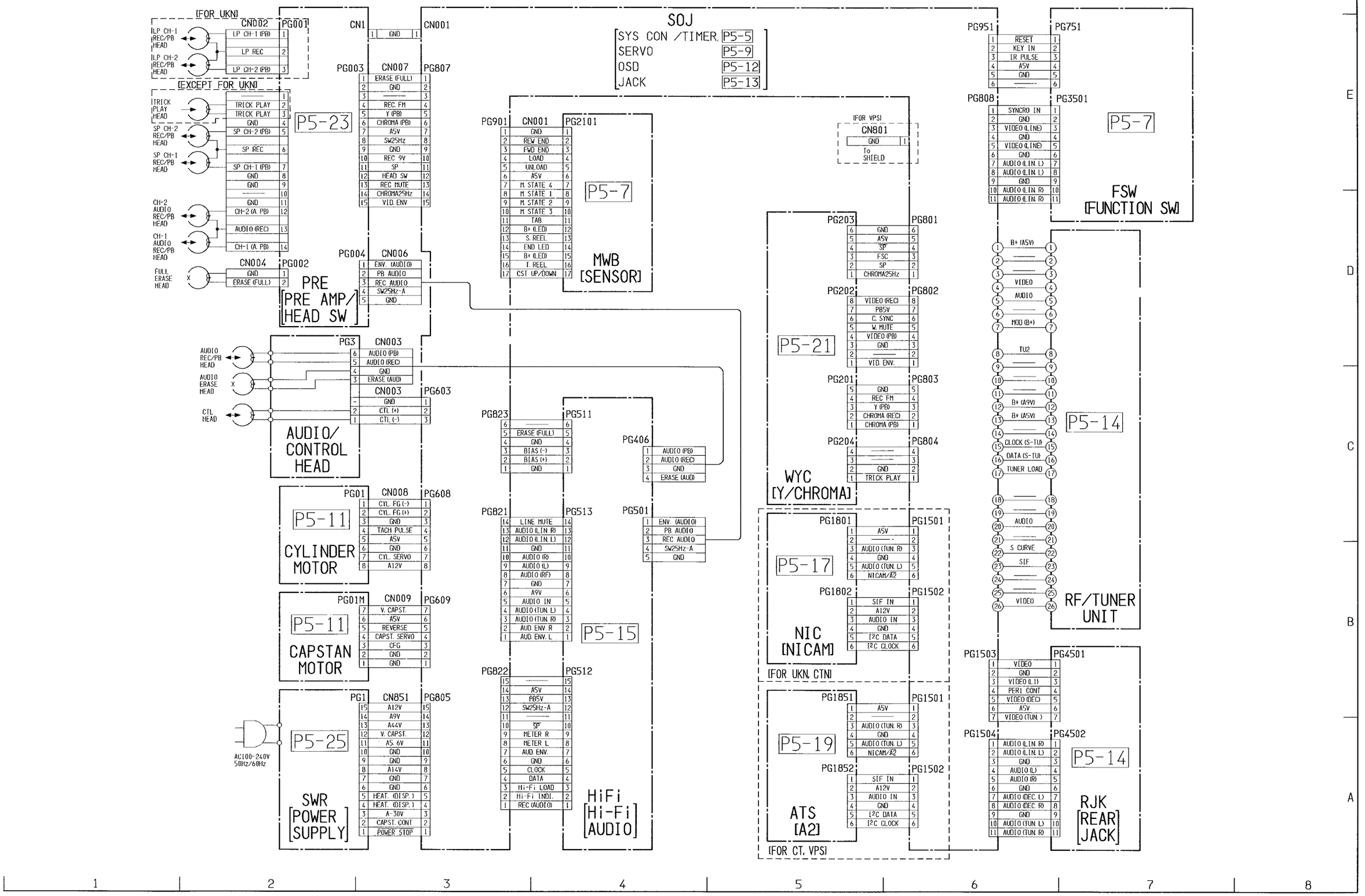
IDENTIFICATION OF PARTS LOCATION

Symbol No.	Parts Location
C201	A-2B
C202	B-3B
C203	A-4A

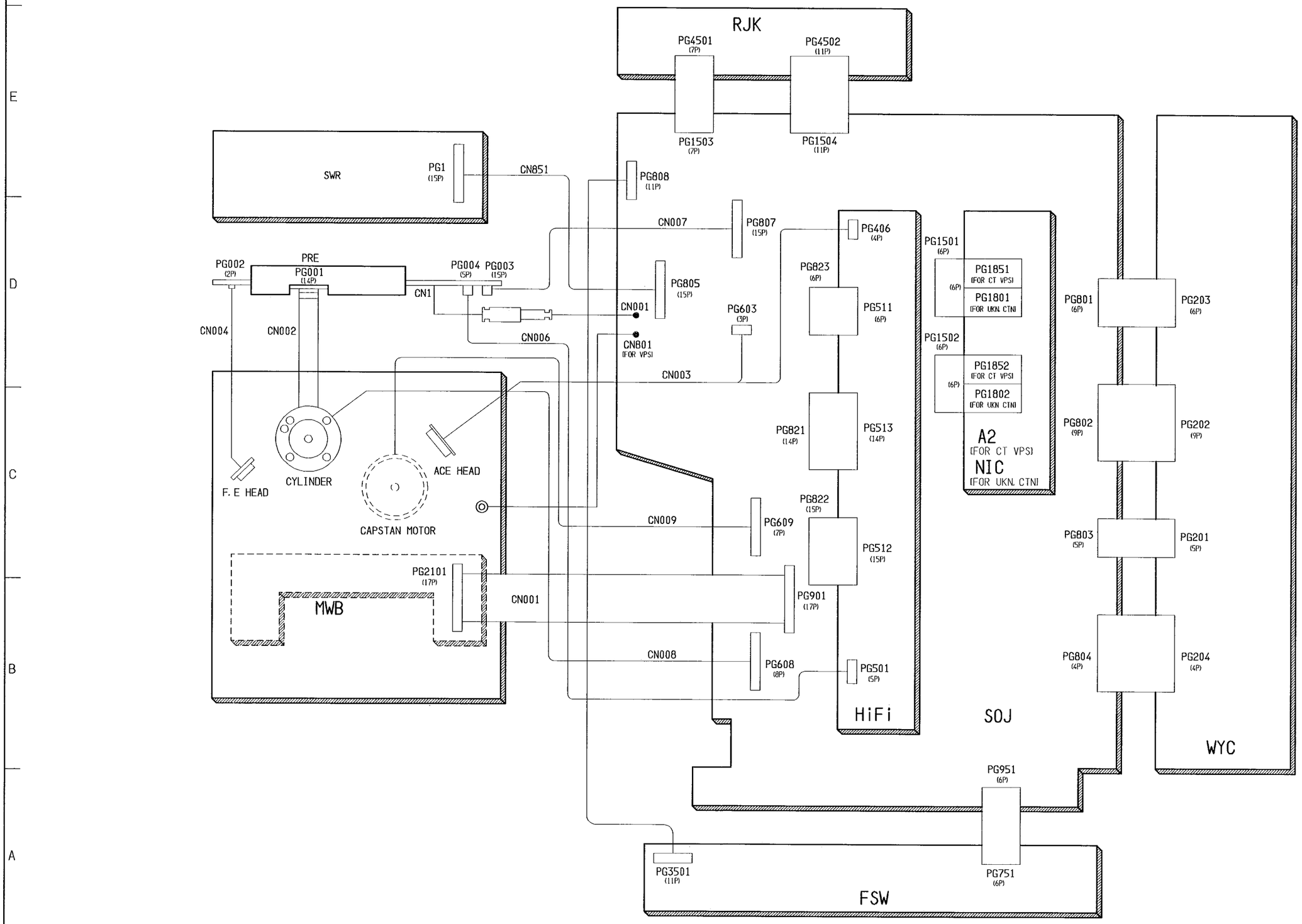
Symbol No.	Parts Location
R201	B-5C
R202	A-5B
Q216	A-9C



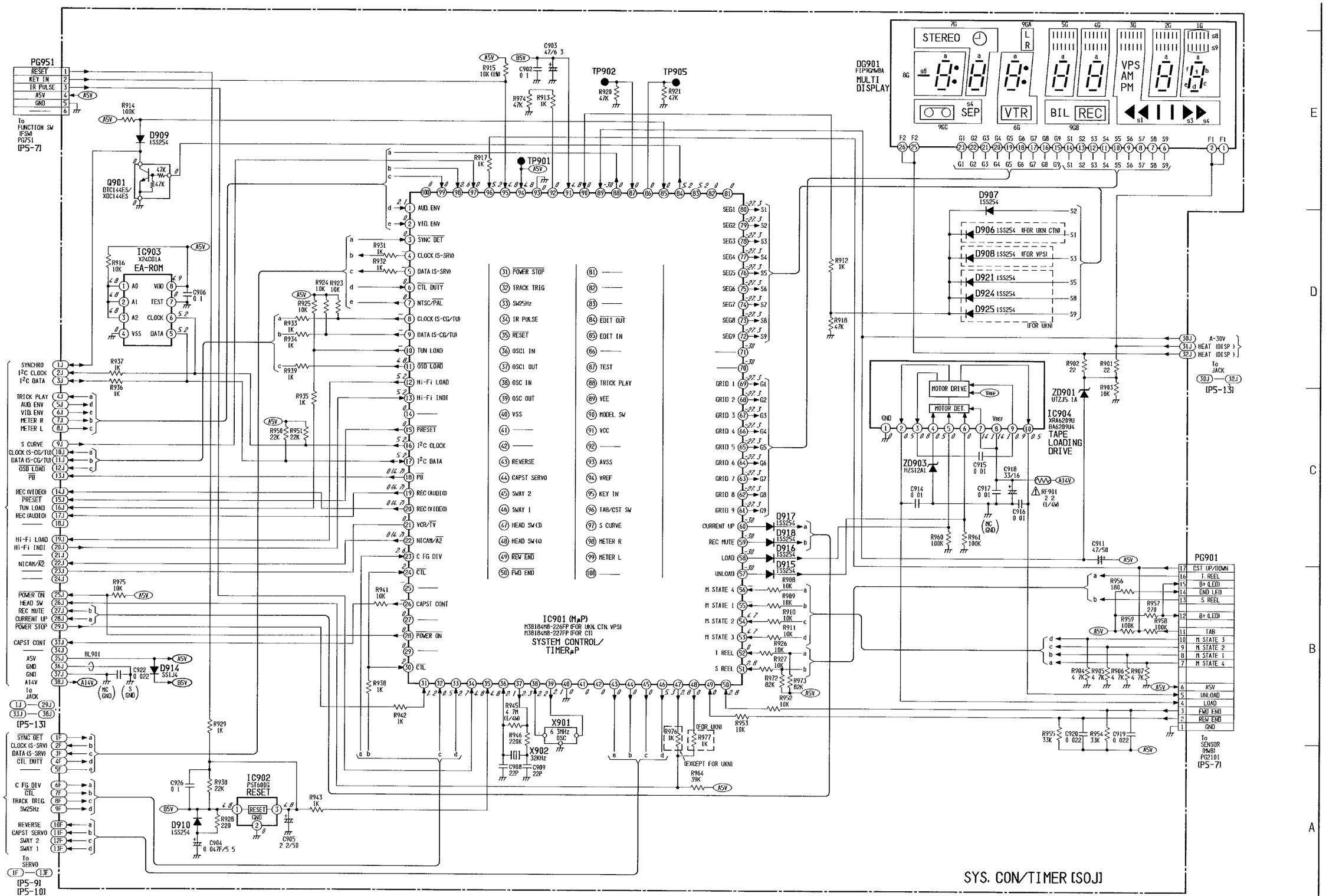
INTERNAL WIRING DIAGRAM



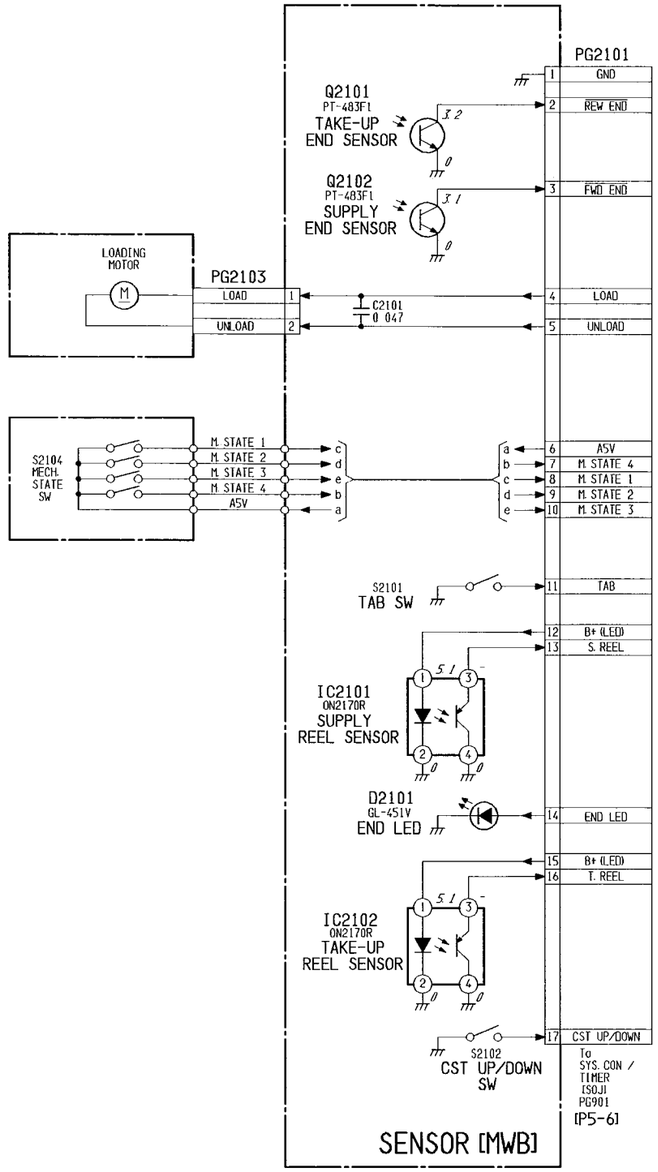
CONNECTION DIAGRAM



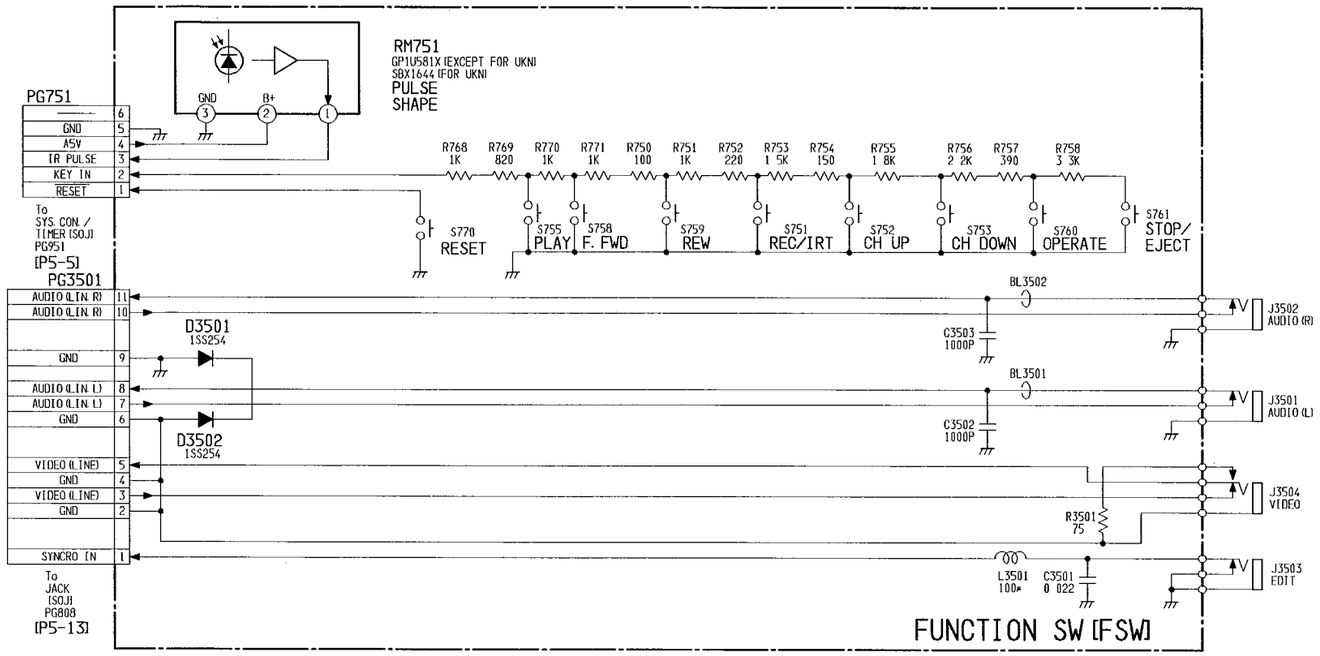
SYSTEM CONTROL/TIMER [SOJ] CHEMATIC DIAGRAM



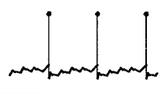
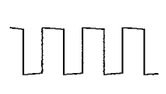
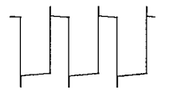
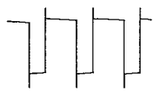
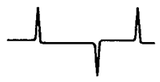
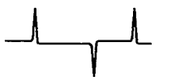
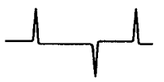
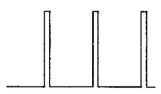
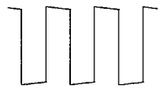
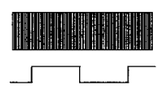
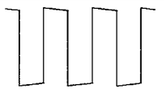
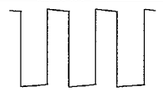
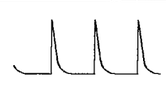
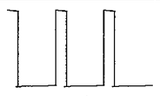
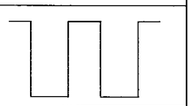
SENSOR [MWB] SCHEMATIC DIAGRAM



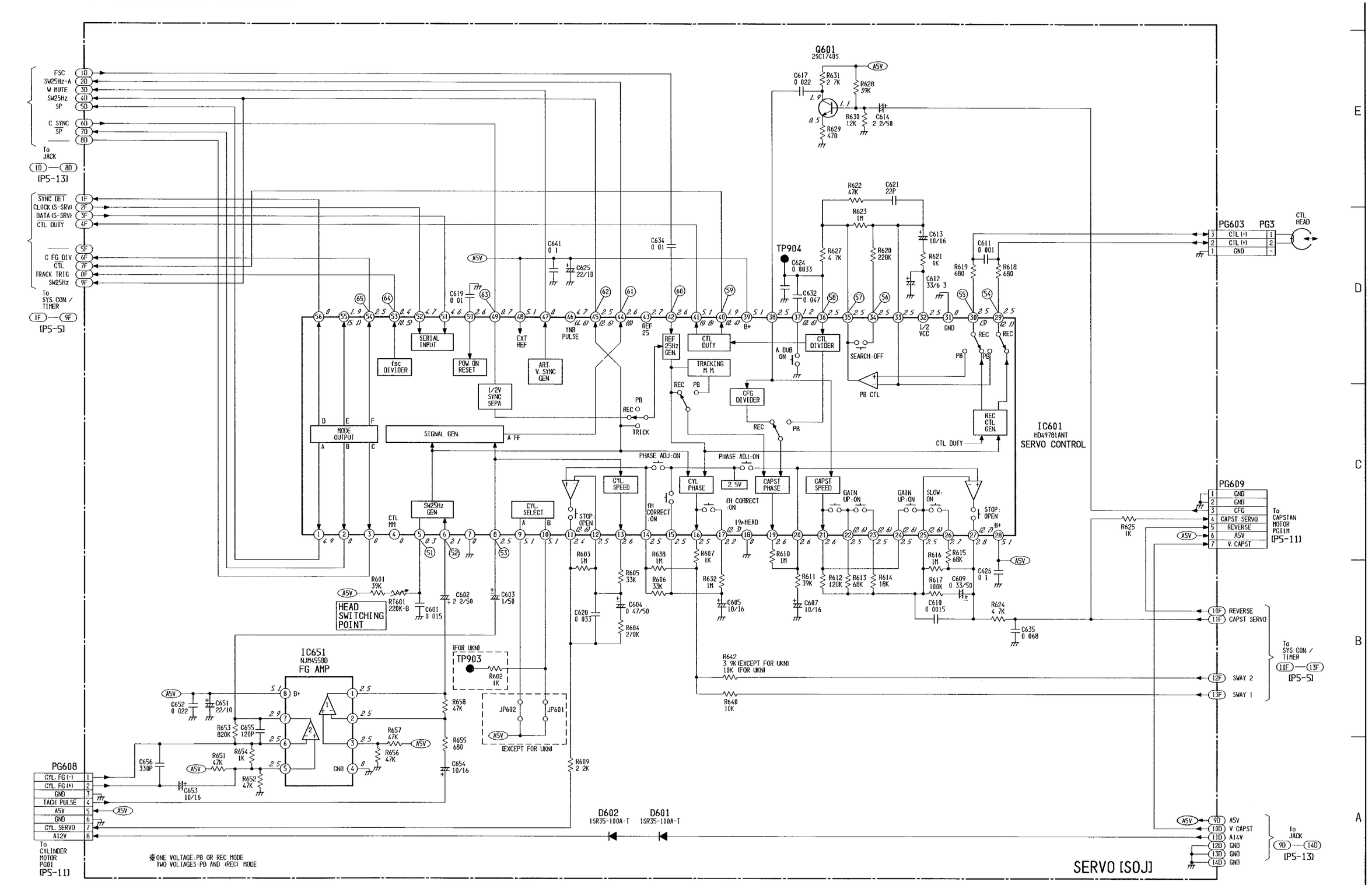
FUNCTION SW [FSW] SCHEMATIC DIAGRAM



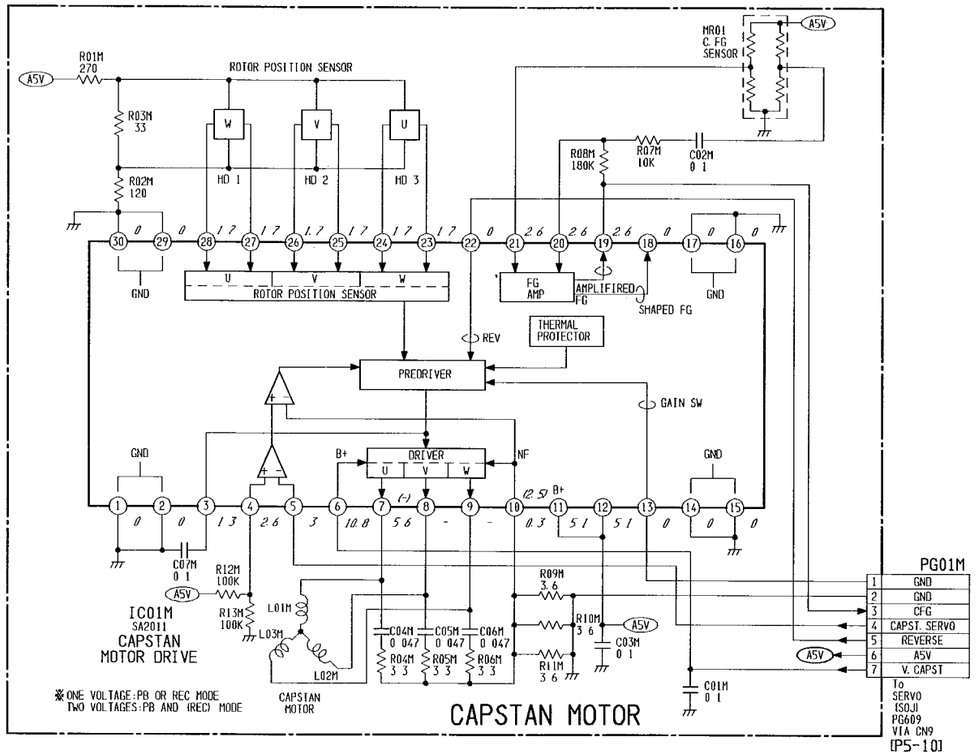
SERVO WAVEFORMS

51-A IC601-5 2.7Vp-p 0.5V/2 0msec cm REC/PLAY	52-A IC601-6 2.3Vp-p 0.5V/10.0msec cm REC/PLAY	53-A IC601-8 3.4Vp-p 1V/1.0msec cm REC/PLAY	54-A IC601-29 5.9Vp-p 1V/10 0msec cm REC	55-A IC601-30 5.9Vp-p 1V/10 0msec cm REC
				
56-A IC601-34 32mVp-p 20mV/20 0μsec cm REC	56-B IC601-34 2.4Vp-p 0.5V/5.0msec cm PLAY	57-A IC601-35 34mVp-p 20mV/20 0μsec cm REC	57-B IC601-35 2.4Vp-p 0.5V/5 0msec cm PLAY	58-B IC601-36 2.4Vp-p 0.5V/5 0msec cm PLAY
				
59-A IC601-40 5.4Vp-p 1V/10.0msec cm REC	59-B IC601-40 5.4Vp-p 1V/10 0msec cm PLAY	60-A IC601-42 520mVp-p 0.2V/5.0msec cm REC/PLAY	61-A IC601-44 27mVp-p 20mV/10 0msec cm REC	61-B IC601-44 5.6Vp-p 1V/10.0msec cm PLAY
				
62-A IC601-45 5.6Vp-p 1V/10.0msec cm REC/PLAY	63-A IC601-49 3.9Vp-p 1V/20.0μsec cm REC/PLAY	64-A IC601-53 5.5Vp-p 1V/10.0msec cm REC/PLAY	65-A IC601-54 5.5Vp-p 1V/100μsec cm REC/PLAY	
				

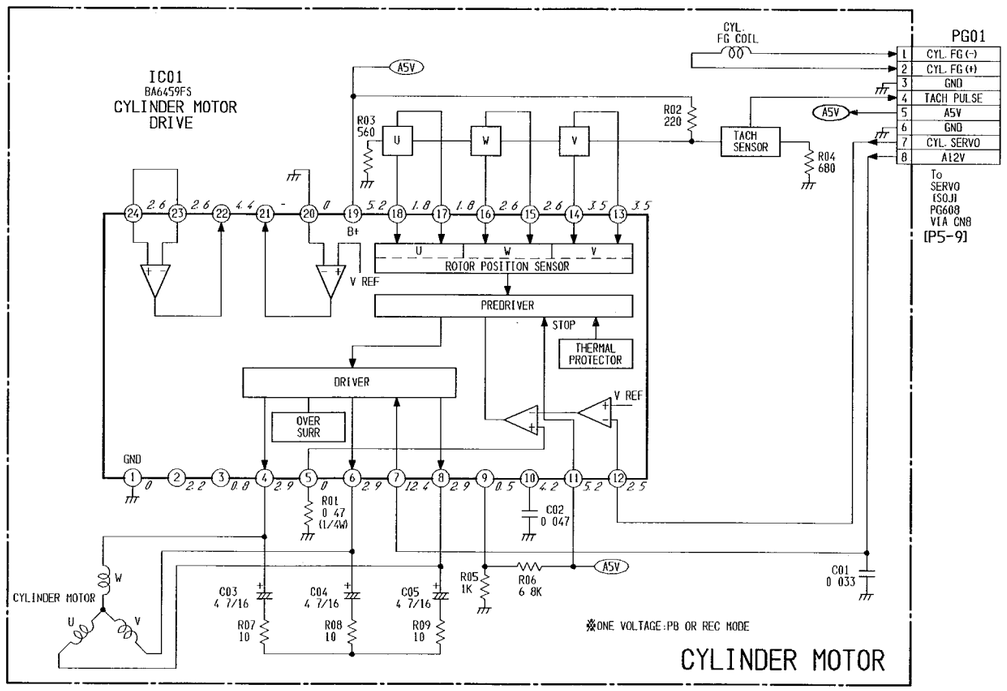
SERVO [SOJ] SCHEMATIC DIAGRAM



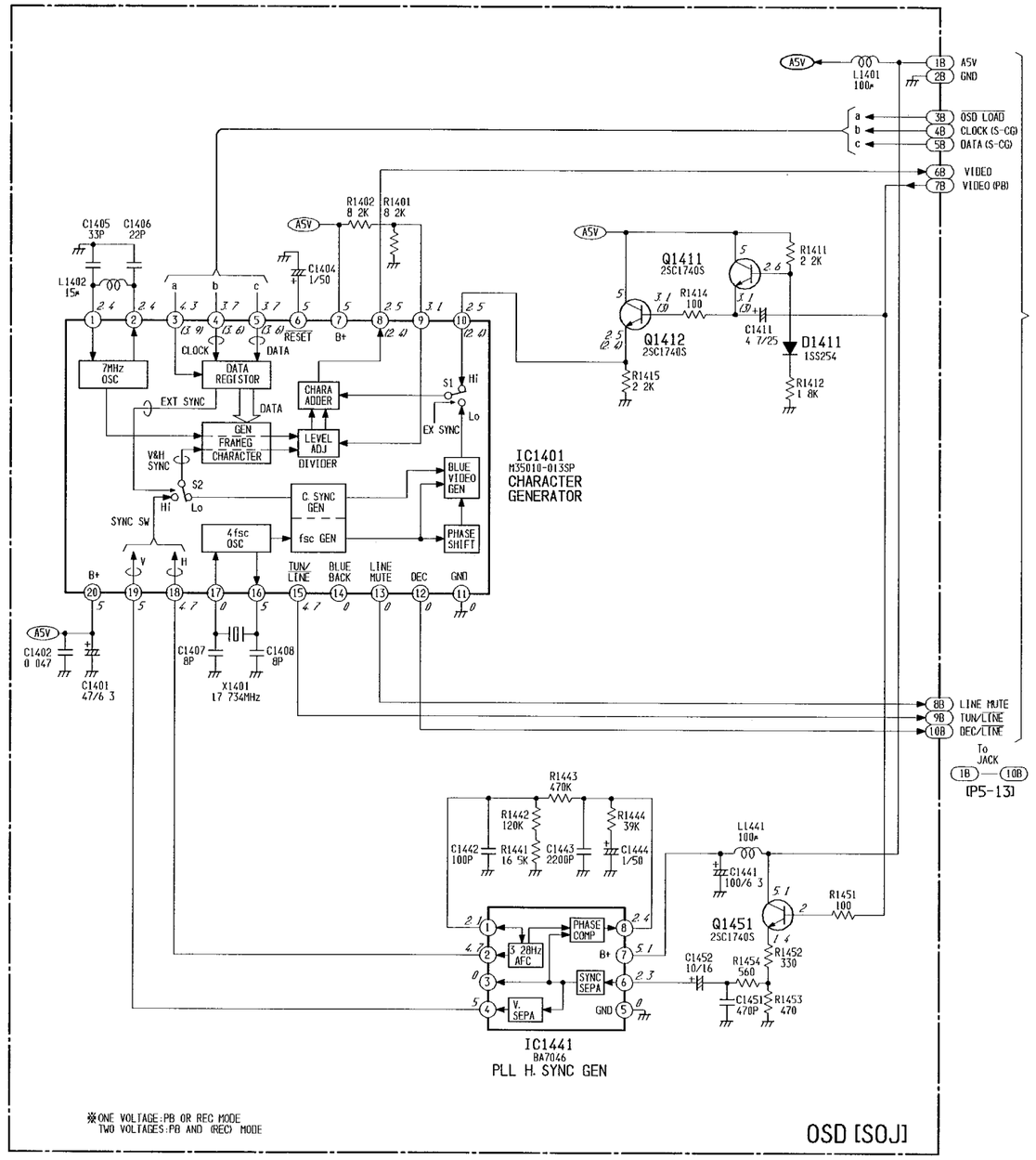
CAPSTAN MOTOR SCHEMATIC DIAGRAM



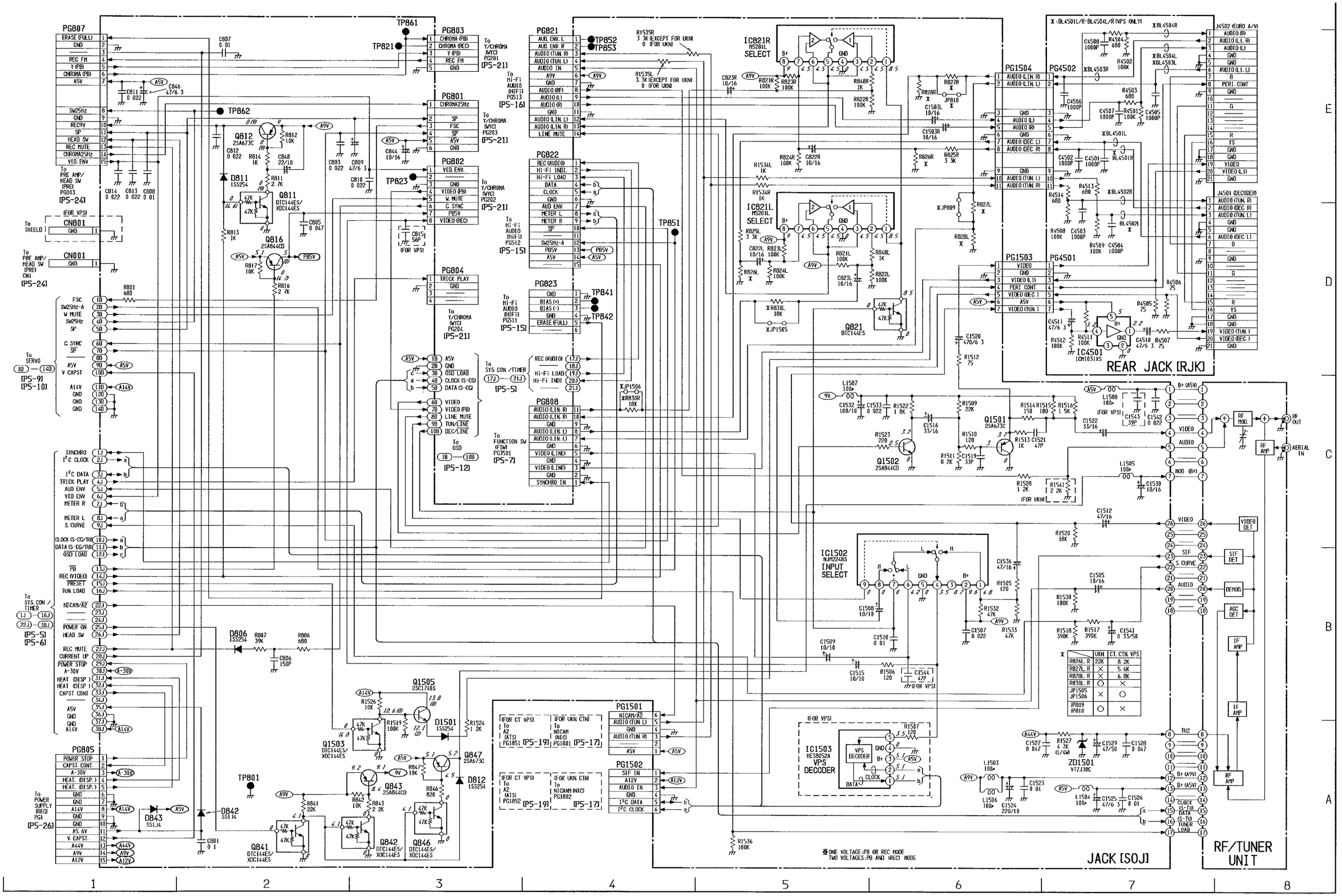
CYLINDER MOTOR SCHEMATIC DIAGRAM



OSD [SOJ] SCHEMATIC DIAGRAM

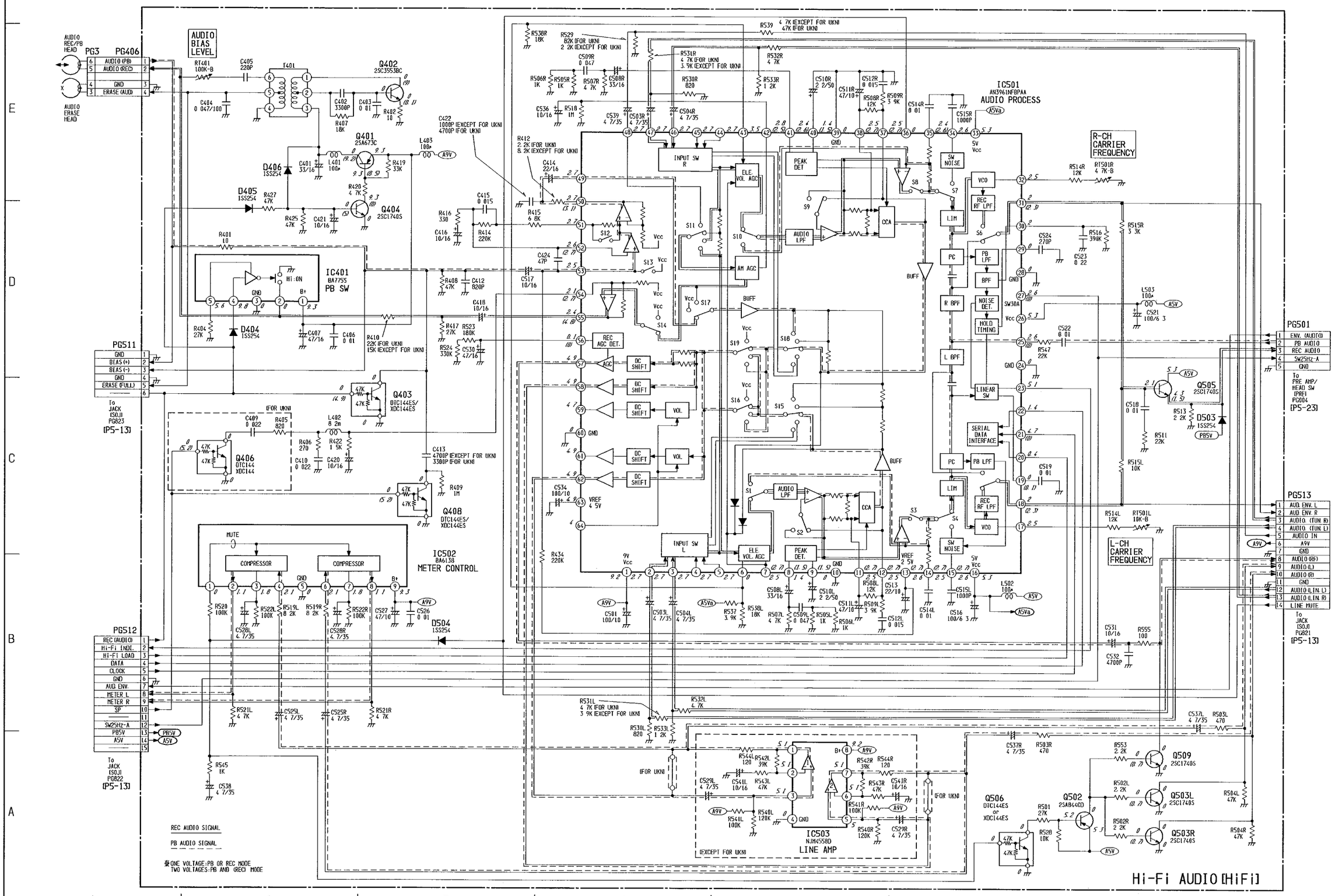


JACK [SOJ], REAR JACK [RJK] SCHEMATIC DIAGRAM



JACK 5-13 5-14 JACK, REAR JACK

Hi-Fi AUDIO [HiFi] SCHEMATIC DIAGRAM



NICAM [NIC] SCHEMATIC DIAGRAM (FOR UKN, CTN)

FOR UKN, CTN

IC1801
CF70091
NICAM DECODER

IC1806
AFS816F14000A1
ACTIVE FILTER

IC1803
BA4560
DUAL OPE AMP

IC1802
TDA1543
D/A CONV.

IC1804
BA31290
SWITCH

Q1804
2SC1740S

QR1801
XDC144ES

CP1801
TRAP
※5.5MHz:FOR CTN
6.0MHz:FOR UKN

X1801
16.384MHz

PG1802
I²C CLOCK 6
I²C DATA 5
GND 4
AUDIO IN 3
A12V 2
STF IN 1
To JACK (SOJI PG1502) [P5-13]

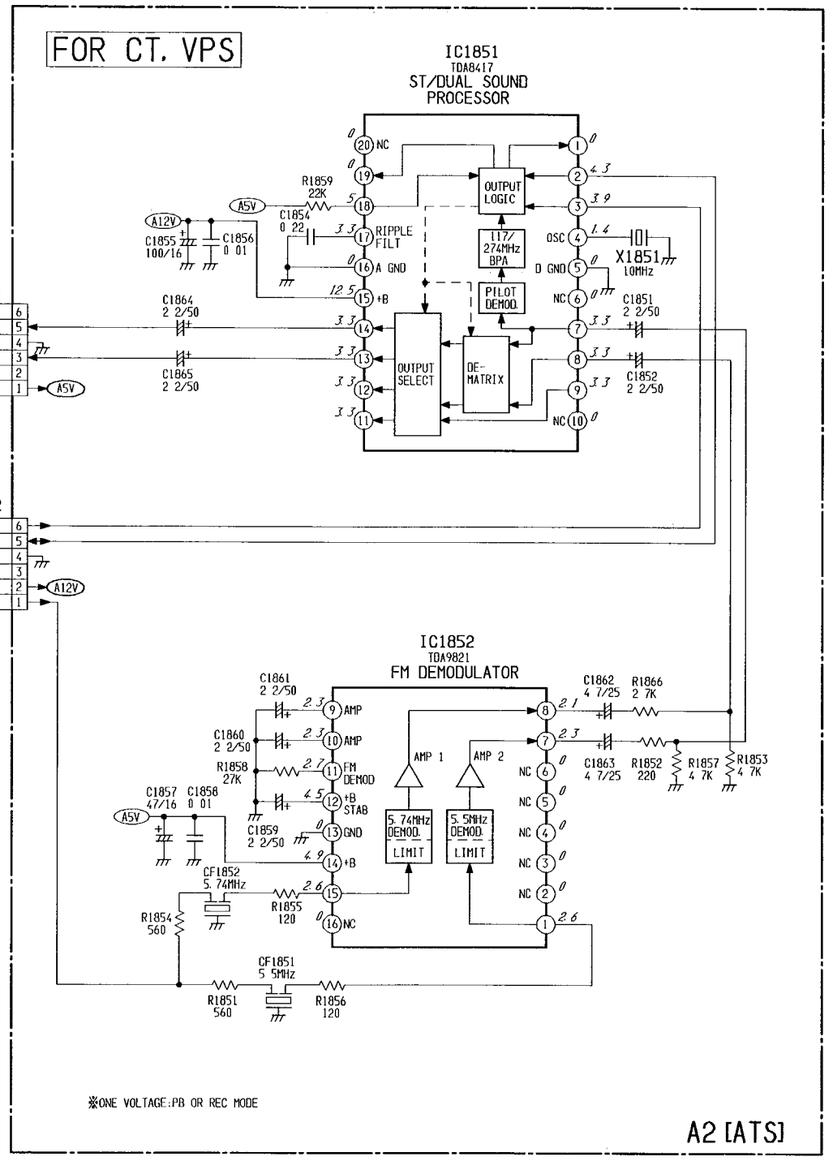
PG1801
6
AUDIO (TUN L) 5
GND 4
AUDIO (TUN R) 3
2
A5V 1
To JACK (SOJI PG1501) [P5-13]

※ONE VOLTAGE:PB OR REC MODE

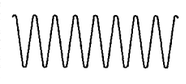
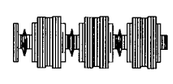
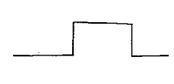
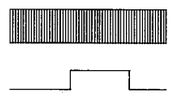
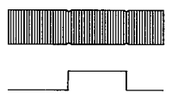
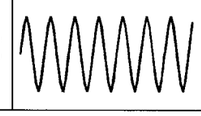
NICAM [NIC]

NICAM 5-17 5-18 NICAM

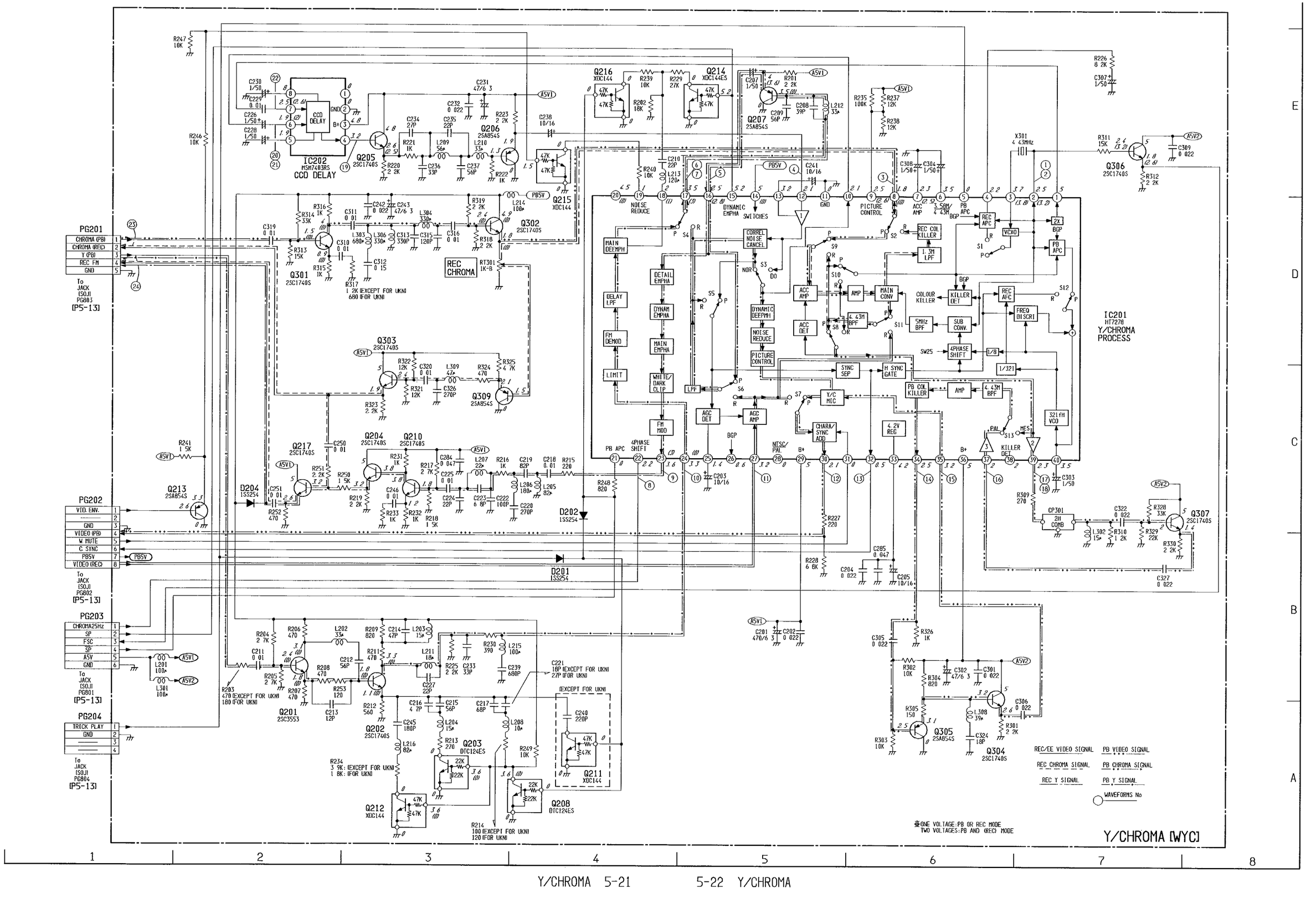
A2 [ATS] SCHEMATIC DIAGRAM (FOR CT. VPS)



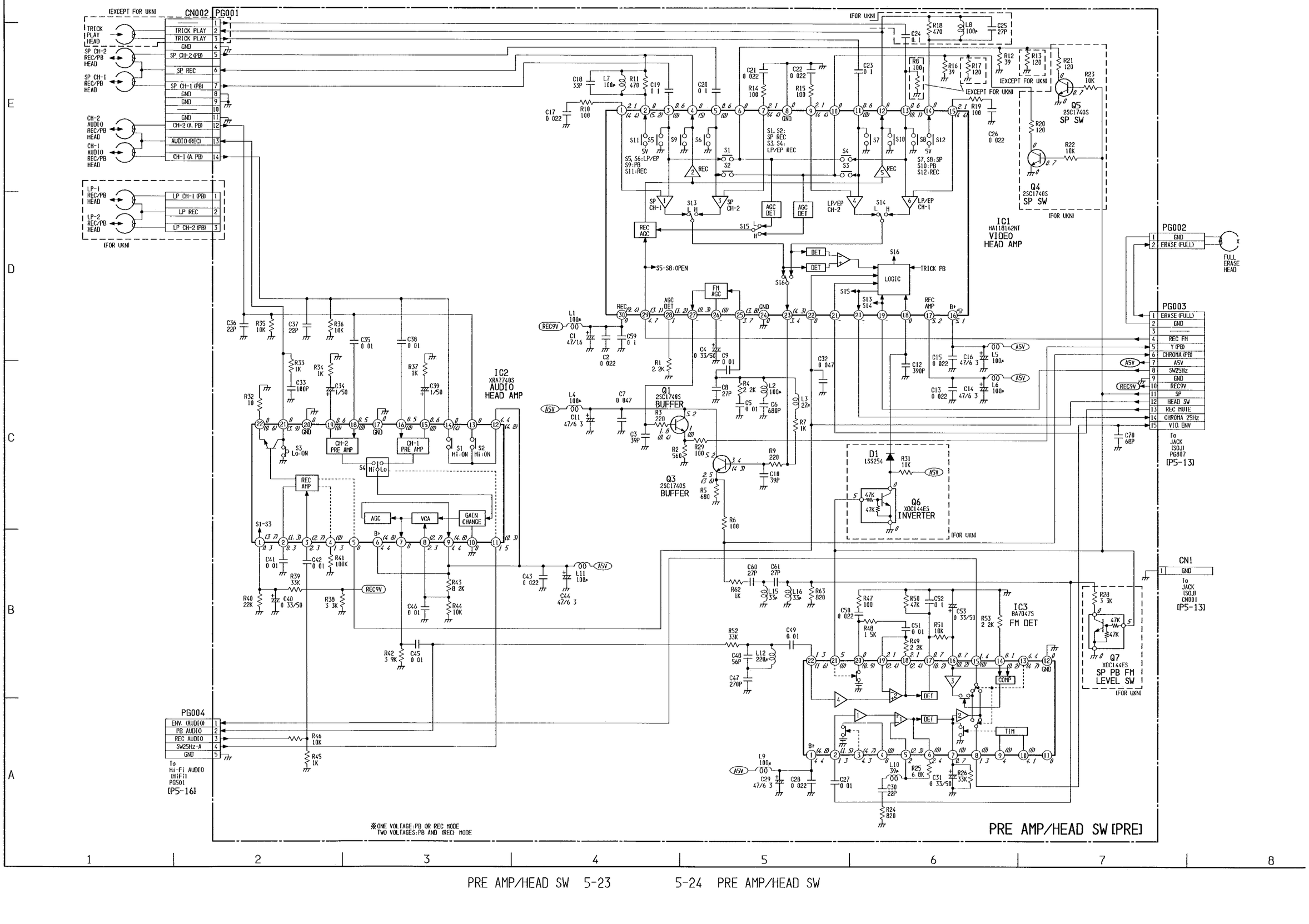
Y/CHROMA WAVEFORMS

1-A IC201-2 600mVp-p 0.2V/200nsec cm REC	2-A IC201-2 820mVp-p 0.2V/200nsec cm PLAY	3-A IC201-8 330mVp-p 0.1V/20.0μsec cm REC	4-A IC201-12 330mVp-p 0.1V/20.0μsec cm REC/PLAY	5-A IC201-16 530mVp-p 0.2V/20.0μsec cm REC/PLAY
				
6-A IC201-17 580mVp-p 0.2V/20.0μsec cm REC	7-A IC201-17 520mVp-p 0.2V/20.0μsec cm PLAY	8-A IC201-22 4.5Vp-p 2V/5.0msec cm REC/PLAY	9-A IC201-23 900mVp-p 0.5V/5.0msec cm REC	10-A IC201-24 510mVp-p 0.2V/5.0msec cm PLAY
				
11-A IC201-27 2.0Vp-p 0.5V/20.0μsec cm REC	12-A IC201-30 2.2Vp-p 0.5V/20.0μsec cm REC/PLAY	13-A IC201-32 4.2Vp-p 1V/20.0μsec cm REC/PLAY	14-A IC201-34 670mVp-p 0.2V/20.0μsec cm PLAY	15-A IC201-35 560mVp-p 0.2V/20.0μsec cm PLAY
16-A IC201-37 190mVp-p 50mV/20.0μsec cm PLAY	17-A IC201-39 880mVp-p 0.2V/20.0μsec cm REC	18-A IC201-39 1Vp-p 0.2V/20.0μsec cm PLAY	19-A IC202-4 600mVp-p 0.2V/20.0μsec cm REC/PLAY	20-A IC202-6 450mVp-p 0.1V/20.0μsec cm REC
21-A IC202-6 310mVp-p 0.1V/20.0μsec cm PLAY	22-A IC202-7 470mVp-p 0.1V/100nsec cm REC/PLAY	23-A PG201-2 200mVp-p 50mV/20.0μsec cm REC	24-A PG201-3 480mVp-p 0.2V/5.0msec cm PLAY	
				

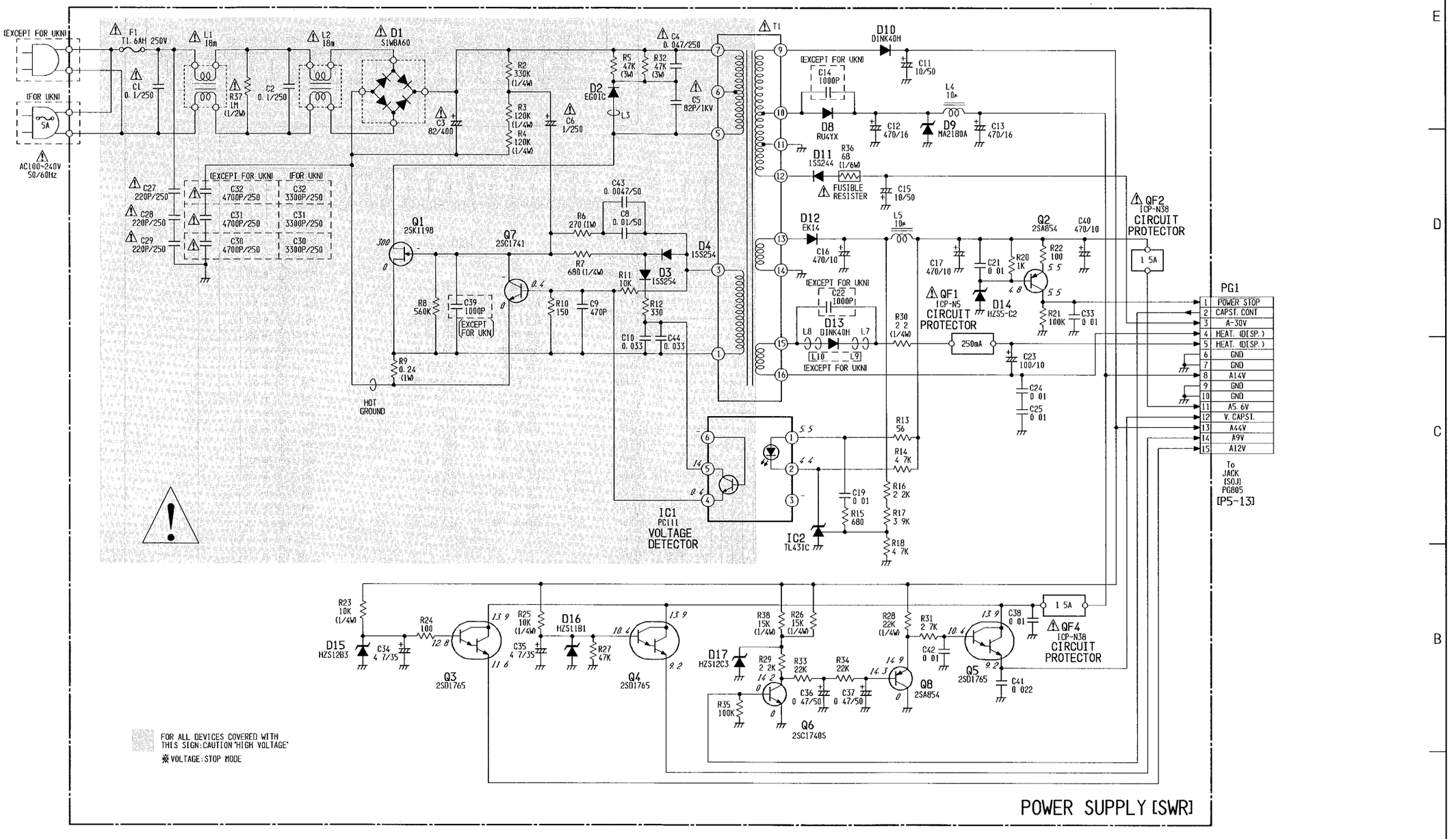
Y/CHROMA [WYC] SCHEMATIC DIAGRAM



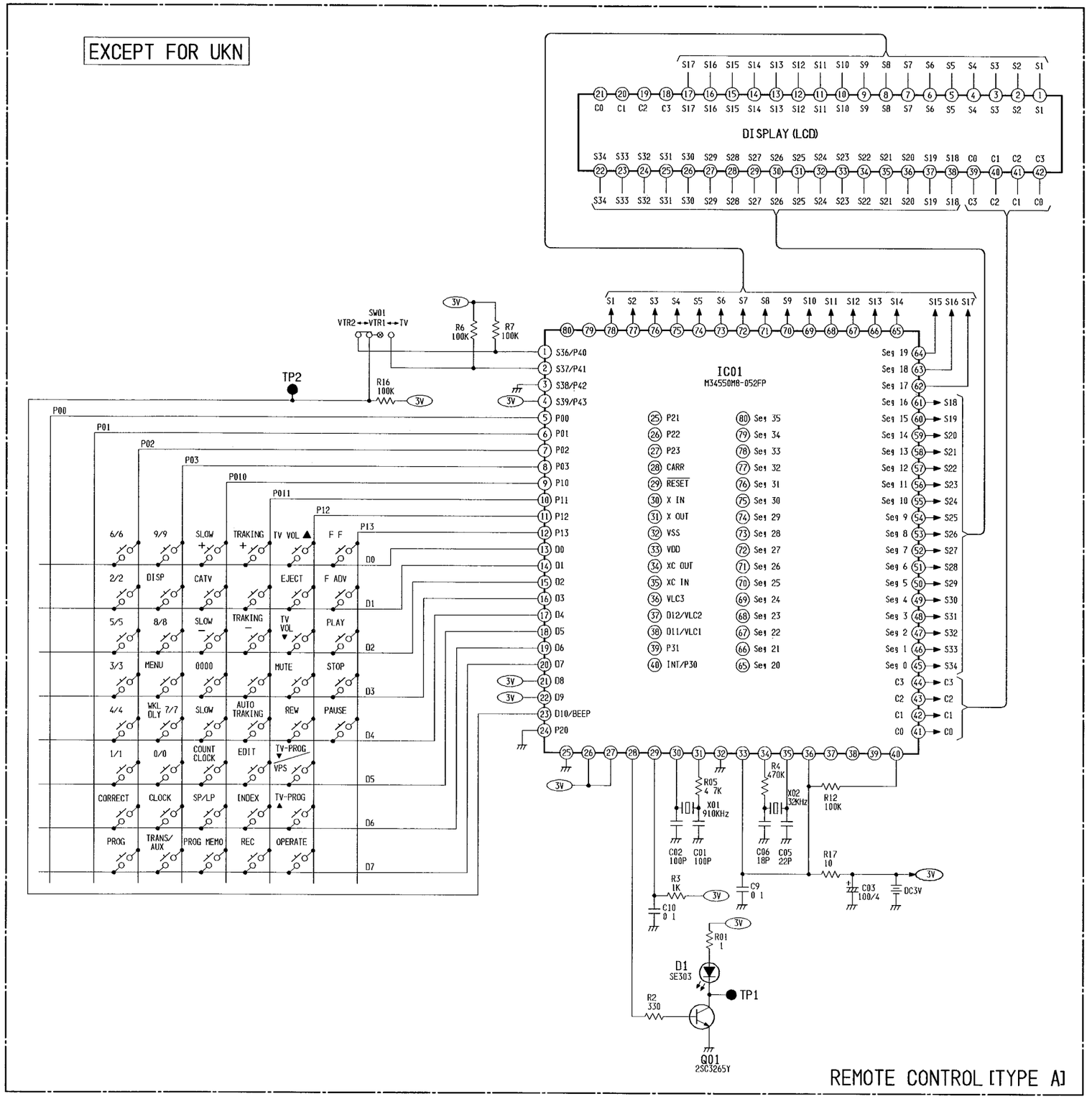
PRE AMP/HEAD SW [PRE] SCHEMATIC DIAGRAM



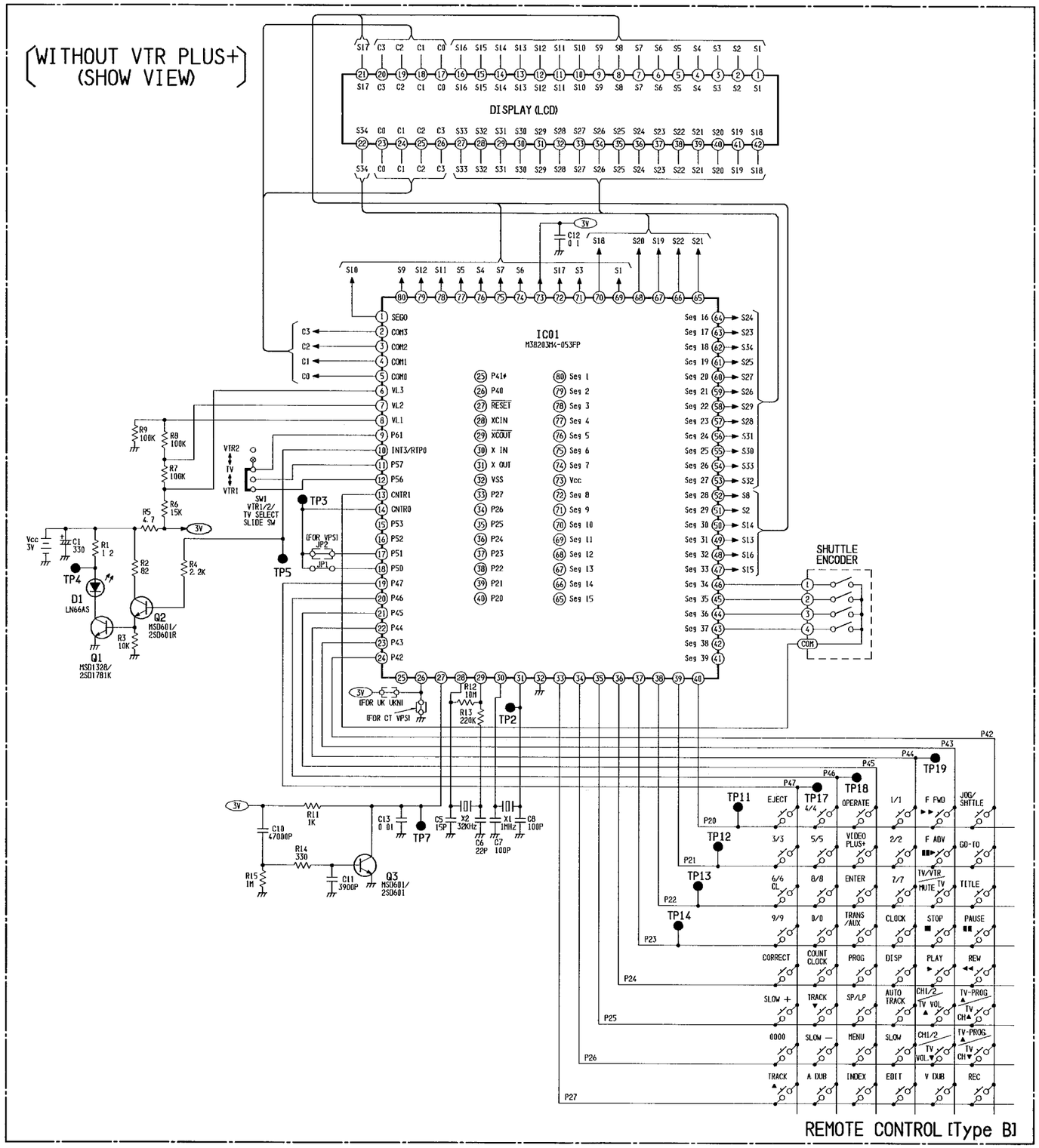
POWER SUPPLY [SWR] SCHEMATIC DIAGRAM



REMOTE CONTROL [TYPE-A] SCHEMATIC DIAGRAM



REMOTE CONTROL [TYPE-B] SCHEMATIC DIAGRAM



SOJ CIRCUIT BOARD

SOJ [MAIN] DIFFRENCE TABLE

SYMBOL No	F350E (CT)	F350E (CTN)	F350E (UKN)	F355E (VPS)
C815	×	×	×	○
C1543	×	×	×	○
C1544	×	×	×	○
CN801	×	×	×	○
D906	×	○	○	×

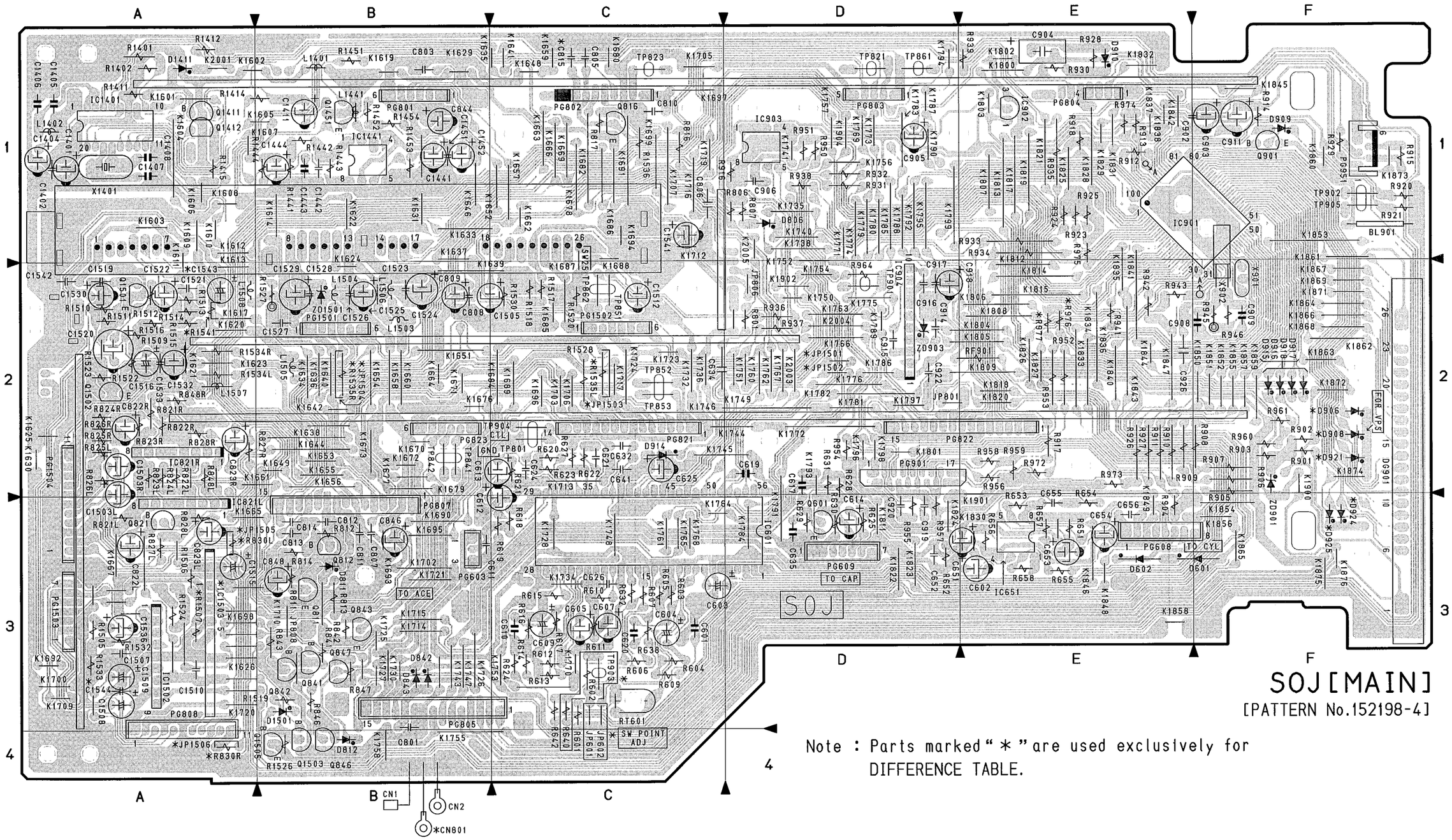
SYMBOL No.	F350E (CT)	F350E (CTN)	F350E (UKN)	F355E (VPS)
D908	×	×	×	○
D921	×	×	○	×
D924	×	×	○	×
D925	×	×	○	×
IC1503	×	×	×	○

SYMBOL No	F350E (CT)	F350E (CTN)	F350E (UKN)	F355E (VPS)
JP601	○	○	×	○
JP602	○	○	×	○
JP809	×	×	○	×
JP810	×	×	○	×
JP1501	×	×	×	○

SYMBOL No	F350E (CT)	F350E (CTN)	F350E (UKN)	F355E (VPS)
JP1502	×	×	×	○
JP1503	×	×	○	×
JP1504	×	×	○	×
JP1505	○	○	×	○
JP1506	○	○	×	○

SYMBOL No.	F350E (CT)	F350E (CTN)	F350E (UKN)	F355E (VPS)
R602	×	×	○	×
R827L, R	○	○	×	○
R828L, R	○	○	×	○
R830L, R	×	×	○	×
R976	○	○	×	○

SYMBOL No.	F350E (CT)	F350E (CTN)	F350E (UKN)	F355E (VPS)
R977	×	×	○	×
R1507	×	×	×	○
R1535L,	○	○	×	○
R1541	×	×	○	×
TP903	×	×	○	×



SOJ [MAIN]

[PATTERN No.152198-4]

Note : Parts marked "＊" are used exclusively for DIFFERENCE TABLE.

IDENTIFICATION OF PARTS LOCATION

SWR [POWER SUPPLY]

Symbol No.	Parts Location
C	
C1	2A
C2	2B
C3	2B
C4	3A
C5	3A
C6	3B
C8	3A
C9	3A
C10	3B
C11	4A
C12	4A
C13	5B
C14	5A
C15	5A
C16	4B
C17	5B
C19	4C
C21	5B
C22	4B
C23	5C
C24	5C
C25	5C
C27	1A
C28	1A
C29	1A
C30	1B
C31	1B
C32	1B
C33	6C
C34	5A
C35	5A
C36	6A
C37	6A
C38	6A
C39	3B
C40	6C
C41	6A
C42	4A
C43	3B
C44	3B
D	
D1	2B
D2	3A
D3	3B
D4	3B
D8	5A
D9	5B
D10	4A
D11	5B
D12	5B
D13	4B
D14	5C
D15	6A
D16	5A
D17	6B
F	
F1	1A
IC	
IC1	4B
IC2	4C
L	
L1	1A
L2	1B
L3	3A
L4	5B
L5	5B
L7	4B
L8	4B
L9	4B
L10	4B
PG	
PG1	6B
Q	
Q1	3A
Q2	5C
Q3	6A
Q4	5A
Q5	5A
Q6	6B
Q7	3B
Q8	5B
QF	
QF1	5B
QF2	6B
QF4	6A
R	
R2	2A
R3	2B
R4	2B
R5	2A
R6	3A
R7	3A
R8	3B
R9	3B
R10	3B
R11	3B
R12	3B
R13	4C
R14	5C
R15	4B
R16	5C
R17	4C
R18	4C
R20	5B
R21	5C
R22	5B
R23	6A
R24	6A
R25	5A
R26	5A
R27	5A
R28	5A
R29	6B
R30	4B
R31	5A
R32	2A
R33	6B
R34	6B
R35	5B
R36	5B
R37	2B
R38	5A
T	
T1	4A

PRE [PRE AMP/HEAD SW]

Symbol No.	Parts Location
C	
C1	4A
C2	5B
C3	2B
C4	4A
C5	3B
C6	3B
C7	4B
C8	3B
C9	4B
C10	4B
C11	2B
C12	4B
C13	4B
C14	5B
C15	5B
C16	5B
C17	4A
C18	4A
C19	4A
C20	4A
C21	4A
C22	4A
C23	5A
C24	5A
C25	5A
C26	5A
C27	1A
C28	2A
C29	1A
C30	2A
C31	2A
C32	4B
C33	4A
C34	3A
C35	3A
C36	3A
C37	3A
C38	3A
C39	3A
C40	3A
C41	3A
C42	3A
C43	4A
C44	3A
C45	2A
C46	3A
C47	2A
C48	2A
C49	2A
C50	2A
C51	2A
C52	2A
C53	2A
C59	4B
C60	1A
C61	1A
C70	1B
CN	
CN1	1B
D	
D1	5B
IC	
IC1	4A
IC2	3A
IC3	2A
L	
L1	5B
L2	3B
L3	4B
L4	2B
L5	5B
L6	4B
L7	4A
L8	5A
L9	2A
L10	2A
L11	2B
L12	2A
L15	1A
L16	1A
PG	
PG1	4A
PG2	5A
PG3	1A
PG4	1B
Q	
Q1	2B
Q3	3B
Q4	5A
Q5	5A
Q6	4B
Q7	1A
R	
R1	4A
R2	2B
R3	4A
R4	3B
R5	3B
R6	2B
R7	4B
R8	5A
R9	4B
R10	4A
R11	4A
R12	5A
R13	5A
R14	4A
R15	4A
R16	5A
R17	5A
R18	5A
R19	5A
R20	5A
R21	5A
R22	5A
R23	5A
R24	2A
R25	2A
R26	2A
R28	1A
R29	1B
R31	5B
R32	4A
R33	4A
R34	3A
R35	4A
R36	3A
R37	3A
R38	1A
R39	3A
R40	4A
R41	3A
R42	3A
R43	3A
R44	3A
R45	3A
R46	3A
R47	2A
R48	2A
R49	2A
R50	2A
R51	2A
R52	2A
R53	2A
R62	1A
R63	1A

NIC [NICAM]

Symbol No.	Parts Location
C	
C1801	2B
C1802	2B
C1803	1B
C1804	1A
C1805	1A
C1806	1A
C1807	2A
C1808	2A
C1810	2A
C1812	2B
C1813	2A
C1814	2A
C1817	1C
C1818	1C
C1821	2C
C1822	2C
C1823	1C
C1824	1C
C1825	1D
C1826	1C
C1827	1B
C1828	1B
C1829	1A
C1830	1A
C1831	1A
C1832	2B
C1833	1A
CP	
CP1801	1A
IC	
IC1802	1B
IC1803	2B
IC1804	2C
IC1806	2A
IC1807	1B
L	
L1801	1A
L1802	1C
PG	
PG1801	1C
PG1802	1A
Q	
Q1804	1A
QR	
QR1801	2B
R	
R1802	2A
R1805	2A
R1807	2B
R1809	1C
R1810	1C
R1811	1C
R1812	1C
R1814	1C
R1815	2C
R1816	1C
R1817	2C
R1818	1C
R1820	1C
R1821	1C
R1822	1C
R1823	2B
R1824	1A
R1825	1A
R1826	1A
R1827	1A
R1828	1A
R1829	1C
R1835	1A
R1836	1A
R1837	1A
X	
X1801	1B

RJK [REAR JACK]

Symbol No.	Parts Location
BL	
BL4501L	1B
BL4501R	1B
BL4502L	1B
BL4502R	1B
BL4503L	1B
BL4503R	1B
BL4504L	1B
BL4504R	1B
C	
C4501	1C
C4502	1C
C4503	1C
C4504	1C
C4505	1B
C4506	1B
C4507	2C
C4508	2C
C4510	1A
C4511	1A
IC	
IC4501	1A
J	
J4501	1A
J4502	2B
PG	
PG4501	2A
PG4502	2B
R	
R4501	1B
R4502	1B
R4503	2B
R4504	2B
R4505	2A
R4506	1A
R4507	1A
R4508	1C
R4509	1C
R4511	1A
R4512	2A
R4513	2B
R4514	2B

ATS [A2]

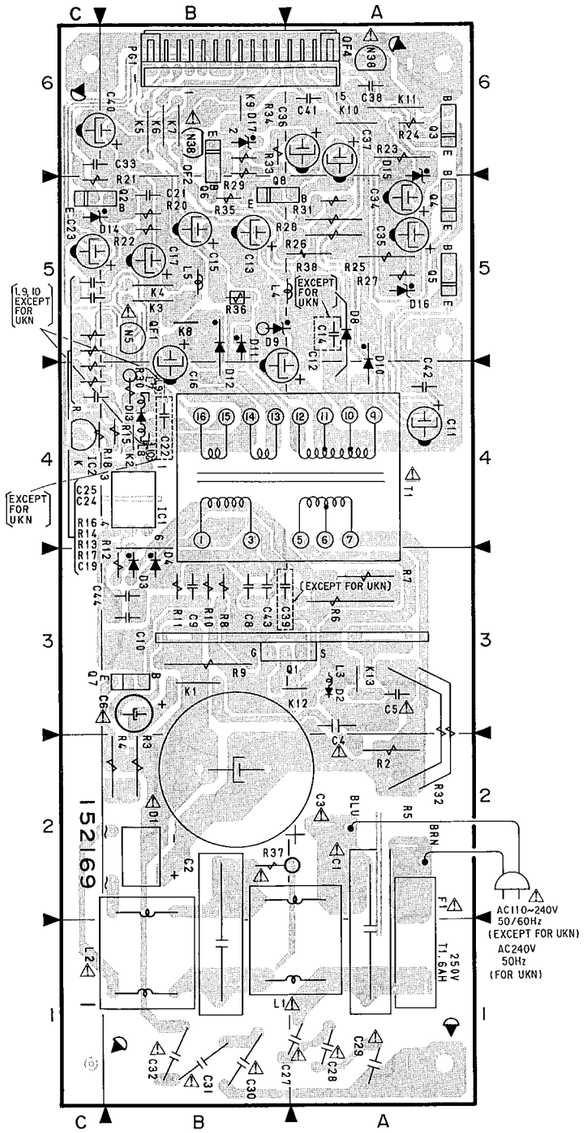
Symbol No.	Parts Location
C	
C1851	2B
C1852	2B
C1854	1B
C1855	1B
C1856	1B
C1857	1A
C1858	1A
C1859	1A
C1860	1A
C1861	1A
C1862	2A
C1863	2A
C1864	1B
C1865	1B
CF	
CF1851	1A
CF1852	1A
IC	
IC1851	1B
IC1852	2A
PG	
PG1851	1B
PG1852	1A
R	
R1851	1A
R1852	2A
R1853	2B
R1854	1A
R1855	1A
R1856	1A
R1857	2B
R1858	1A
R1859	1B
R1866	2B
X	
X1851	2B

IDENTIFICATION OF PARTS LOCATION

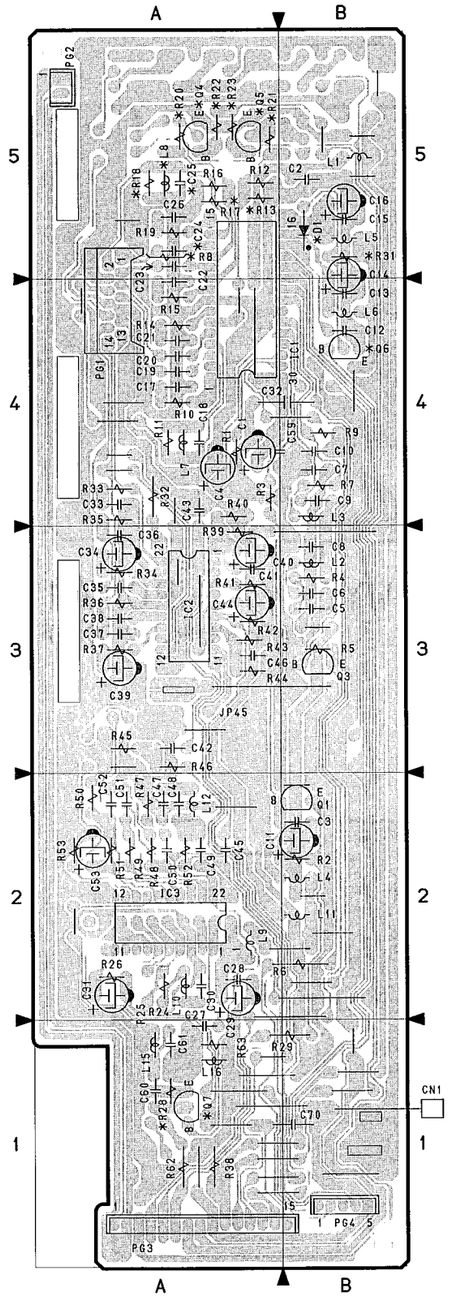
SOJ [MAIN]

Symbol No.	Parts Location
BL	
BL901	1F
C	
C601	3C
C602	3E
C603	3C
C604	3C
C605	3C
C607	3C
C609	3C
C610	3C
C611	3B
C612	3C
C613	2C
C614	3D
C617	2D
C619	2D
C620	3C
C621	2C
C624	2C
C625	2C
C626	3C
C632	2C
C634	2C
C635	3D
C641	2C
C651	3E
C652	3D
C653	3E
C654	3E
C655	3E
C656	3E
C801	3B
C803	1B
C805	1C
C806	1C
C807	3B
C808	2B
C809	2B
C810	1C
C811	3B
C812	3B
C813	3B
C814	3B
C815	1C
C822L	3A
C822R	2A
C823L	3A
C823R	2A
C844	1B
C846	3B
C848	3B
C902	1F
C903	1F
C904	1E
C905	1D
C906	1D
C908	2F
C909	2F
C911	1F
C914	2D
C915	2D
C916	2D
C917	2D
C918	2D
C919	3D
C920	3D
C922	2D
C926	2E
C1401	1A
C1402	1A
C1404	1A
C1405	1A
C1406	1A
C1407	1A
C1408	1A
C1411	1B
C1441	1B
C1442	1B
C1443	1B
C1444	1B
C1451	1B
C1452	1B
C1503L	2A
C1503R	2A
C1505	2B
C1507	3A
C1508	3A
C1509	3A
C1510	3A
C1512	2C
C1515	3A
C1516	2A
C1519	2A
C1520	2A
C1521	2A
C1522	2A
C1523	
C1524	
C1525	2B
C1526	2B
C1527	2B
C1528	2B
C1529	2B
C1530	2A
C1532	2A
C1533	2A
C1536	3A
C1541	1C
C1542	2A
C1543	2A
C1544	3A
CN	
CN1	4B
CN2	4B
CN801	4B
D	
D601	3E
D602	3E
D806	1D
D811	3B
D812	4B
D842	3B
D843	3B
D906	2F
D908	2F
D909	1F
D910	1E
D914	2C
D915	2F
D916	2F
D917	2F
D918	2F
D921	2F
D924	3F
D925	3F
D1411	1A
D1501	3B
DG	
DG901	2F
IC	
IC601	3C
IC651	3E
IC821L	3A
IC821R	2A
IC901	1F
IC902	1E
IC903	1D
IC904	2D
IC1401	1A
IC1441	1B
IC1502	3A
IC1503	3A
L	
L1401	1B
L1402	1A
L1441	1B
L1503	2B
L1504	2B
L1505	2B
L1506	2B
L1507	2A
L1508	2A
PG	
PG603	3B
PG608	3E
PG609	3D
PG801	1B
PG802	1C
PG803	1D
PG804	1E
PG805	3B
PG807	3B
PG808	4A
PG821	2C
PG822	2D
PG823	2B
PG901	2D
PG951	1F
PG1501	2B
PG1502	2C
PG1503	3A
PG1504	3A
Q	
Q601	3D
Q811	3B
Q812	3B
Q816	1C
Q821	3A
Q841	3B
Q842	3B
Q843	3B
Q846	4B
Q847	3B
Q901	1F
Q1411	1A
Q1412	1A
Q1451	1B
Q1501	2A
Q1502	2A
Q1503	4B
Q1505	4B
R	
R601	3C
R602	3C
R603	3C
R604	3C
R605	3C
R606	3C
R607	3C
R609	3C
R610	3C
R611	3C
R612	3C
R613	3C
R614	3C
R615	3C
R616	3C
R617	3C
R618	3C
R619	3C
R620	2C
R621	2C
R622	2C
R623	2C
R624	3C
R625	3D
R627	2C
R628	2D
R629	3D
R630	3D
R631	2D
R632	3C
R638	3C
R640	3C
R642	3C
R651	3E
R652	3D
R653	3E
R654	3E
R655	3E
R656	3E
R657	3E
R658	3E
R801	2D
R806	1D
R807	1D
R811	3B
R812	3B
R813	3B
R814	3B
R816	1C
R817	1C
R821L	3A
R821R	2A
R822L	2A
R822R	2A
R823L	2A
R823R	2A
R824L	2A
R824R	2A
R825L	2A
R825R	2A
R826L	2A
R826R	2A
R827L	3A
R827R	2A
R828L	3A
R828R	2A
R830L	3A
R830R	4A
R841	3B
R842	3B
R843	3B
R846	3B
R847	3B
R848L	2A
R848R	2A
R901	2F
R902	2F
R903	2F
R904	3E
R905	2F
R906	2F
R907	2F
R908	2F
R909	2E
R910	2E
R911	2E
R912	1E
R913	1E
R914	1F
R915	1F
R916	1D
R917	2E
R918	1E
R920	1F
R921	1F
R923	1E
R924	1E
R925	1E
R926	2E
R927	2E
R928	1E
R929	1F
R930	1E
R931	1D
R932	1D
R933	1E
R934	1E
R935	1E
R936	2D
R937	2D
R938	1D
R939	1E
R941	2E
R942	2E
R943	2E
R945	2F
R946	2F
R950	1D
R951	1D
R952	2E
R953	2E
R954	2D
R955	3D
R956	2E
R957	3D
R958	2E
R959	2E
R960	2F
R961	2F
R964	2D
R972	2E
R973	2E
R974	1E
R975	1E
R976	2E
R977	2E
R1401	1A
R1402	1A
R1411	1A
R1412	1A
R1414	1A
R1415	1A
R1441	1B
R1442	1B
R1443	1B
R1444	1B
R1451	1B
R1452	1B
R1453	1B
R1454	1B
R1505	3A
R1506	3A
R1507	3A
R1509	2A
R1510	2A
R1511	2A
R1512	2A
R1513	2A
R1514	2A
R1515	2A
R1516	2A
R1517	2C
R1518	2C
R1519	3B
R1520	2C
R1522	2A
R1523	2A
R1524	3A
R1526	4B
R1527	2B
R1528	2C
R1530	2C
R1532	3A
R1533	3A
R1534L	2A
R1534R	2A
R1535L	2C
R1535R	2B
R1536	1C
R1541	2A
RF	
RF901	2E
RT	
RT601	3C
TP	
TP801	2C
TP821	1D
TP823	1C
TP841	2B
TP842	2B
TP851	2C
TP852	2C
TP853	2C
TP861	1D
TP862	2C
TP901	2D
TP902	1F
TP903	3C
TP904	2C
TP905	1F
X	
X901	2F
X902	2F
X1401	1A
ZD	
ZD901	2F
ZD903	2D
ZD1501	2B

SWR. PRE. NIC. FSW. RJK. ATS CIRCUIT BOARDS



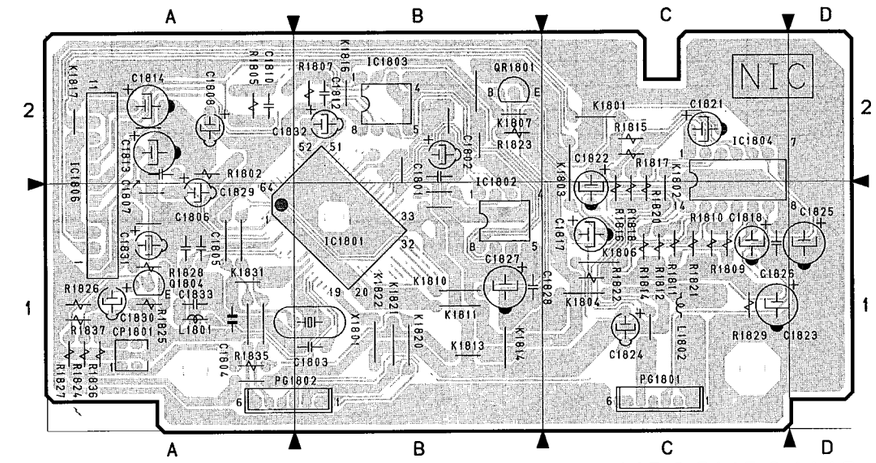
SWR [POWER SUPPLY]



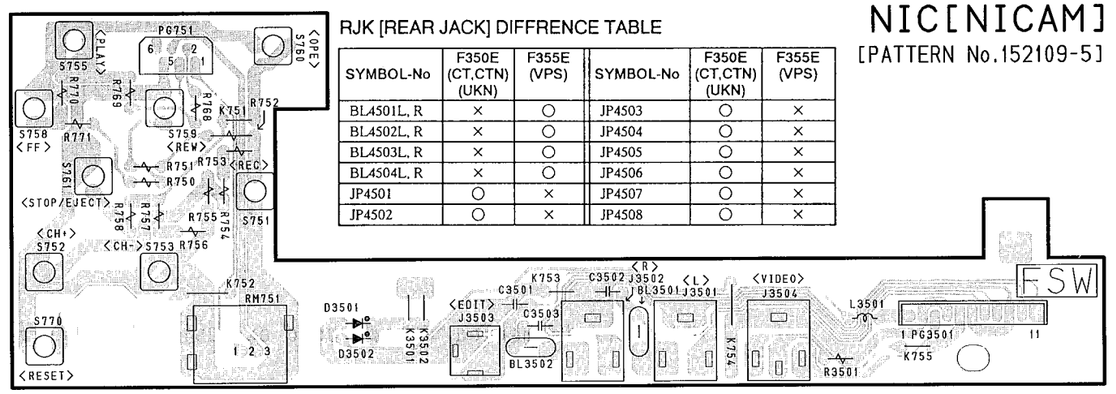
PRE[PREAMP/HEAD SW]
[PATTERN No.152172-3]

PRE [PRE AMP/HEAD SW]
DIFFRENCE TABLE

SYMBOL-No.	F350E (CT,CTN) F355E (VPS)	F350E (UKN)
C24	×	○
C25	×	○
R8, R13, R17	○	×
R18, R20, R21, R22, R23	×	○
R28, R31	×	○
L8	×	○
Q4, Q5, Q6, Q7	×	○
D1	×	○



NIC[NICAM]
[PATTERN No.152109-5]

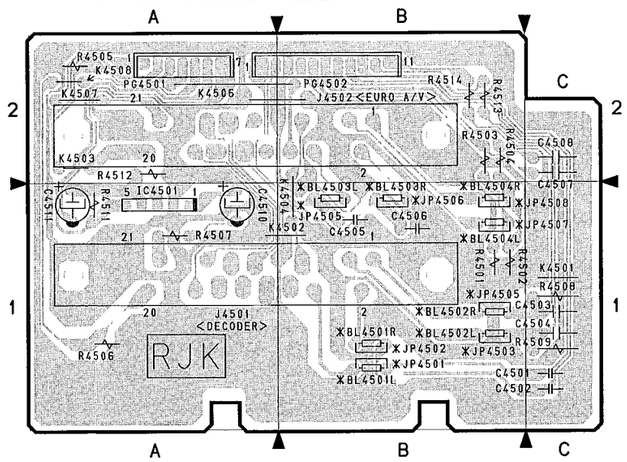


FSW[FUNCTION SW]
[PATTERN No.152198-4]

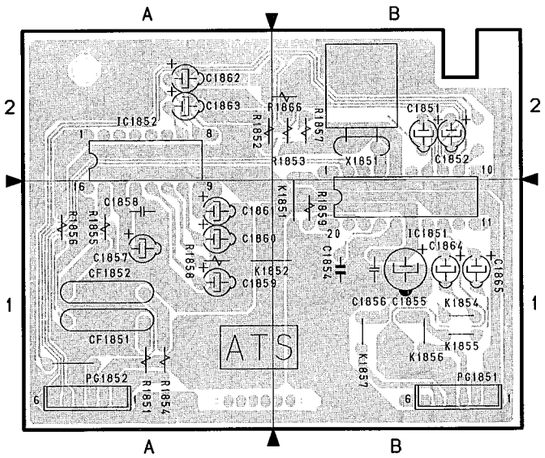
RJK [REAR JACK] DIFFRENCE TABLE

SYMBOL-No	F350E (CT,CTN) (UKN)	F355E (VPS)	SYMBOL-No	F350E (CT,CTN) (UKN)	F355E (VPS)
BL4501L, R	×	○	JP4503	○	×
BL4502L, R	×	○	JP4504	○	×
BL4503L, R	×	○	JP4505	○	×
BL4504L, R	×	○	JP4506	○	×
JP4501	○	×	JP4507	○	×
JP4502	○	×	JP4508	○	×

Note :Parts marked"＊"are used exclusively for DIFFERENCE TABLE.



RJK[REAR JACK]
[PATTERN No.152109-5]



ATS[A2]
[PATTERN No.152109-5]

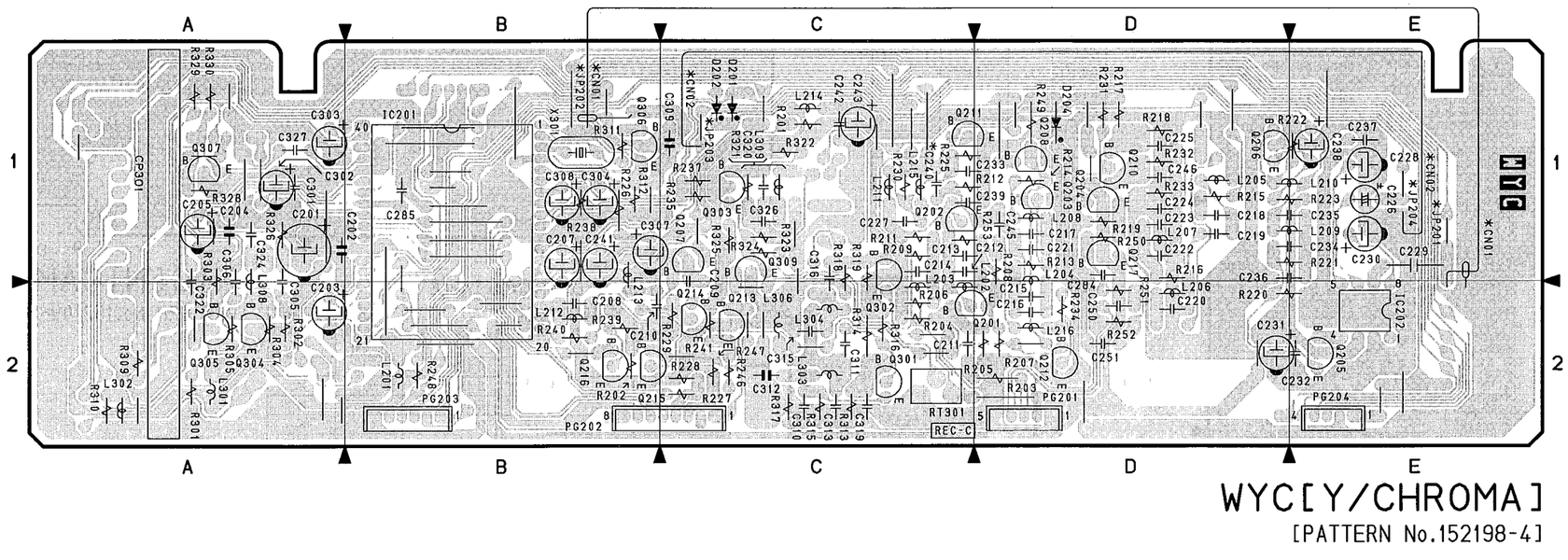
WYC. HiFi. MWB CIRCUIT BOARDS

WYC [Y/CHROMA] DIFFRENCE TABLE

SYMBOL-No	F350E (CT,CTN)	F350E (UKN)	F355E (VPS)	SYMBOL-No	F350E (CT,CTN)	F350E (UKN)	F355E (VPS)
C240	○	×	○	JP202	○	○	×
CN01	×	×	○	JP203	○	○	×
CN02	×	×	○	JP204	○	○	×
JP201	○	○	×	Q211	○	×	○

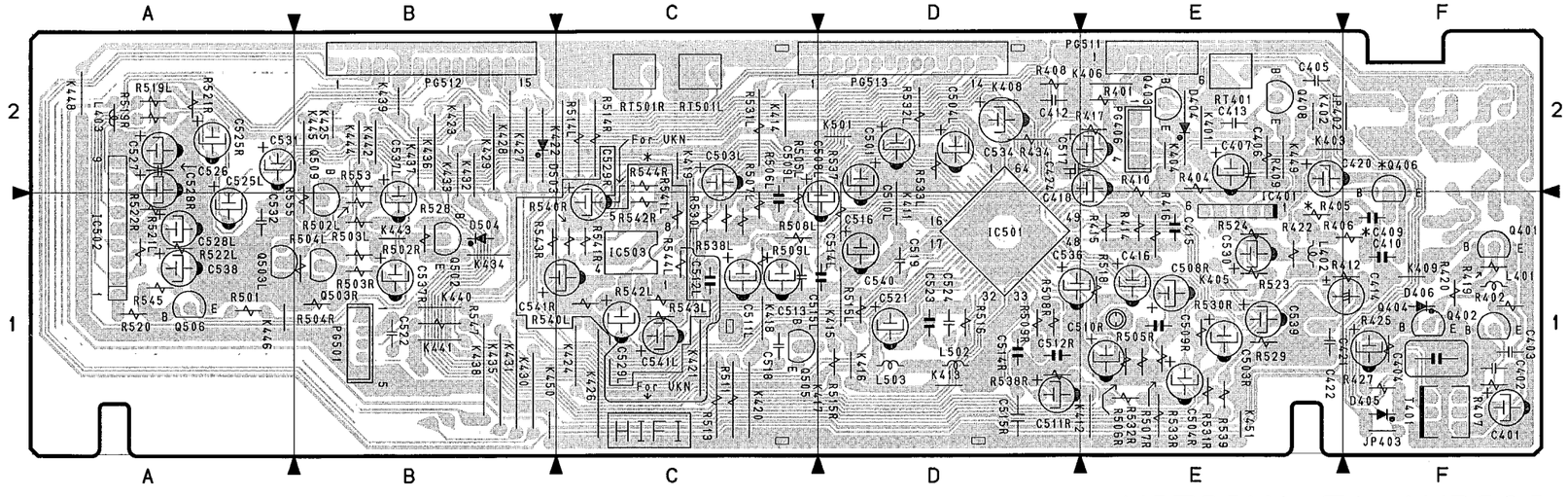
HIFI [Hi-Fi AUDIO] DIFFRENCE TABLE

SYMBOL-No	F350E (CT,CTN) F355E (VPS)	F350E (UKN)	SYMBOL-No	F350E (CT,CTN) F355E (VPS)	F350E (UKN)	SYMBOL-No	F350E (CT,CTN) F355E (VPS)	F350E (UKN)
C409	×	○	Q406	×	○	R542L, R	○	×
C529L, R	○	×	R405	×	○	R543L,R	○	×
C541L, R	○	×	R540L, R	○	×	R544L,R	○	×
IC503	○	×	R541L, R	○	×			

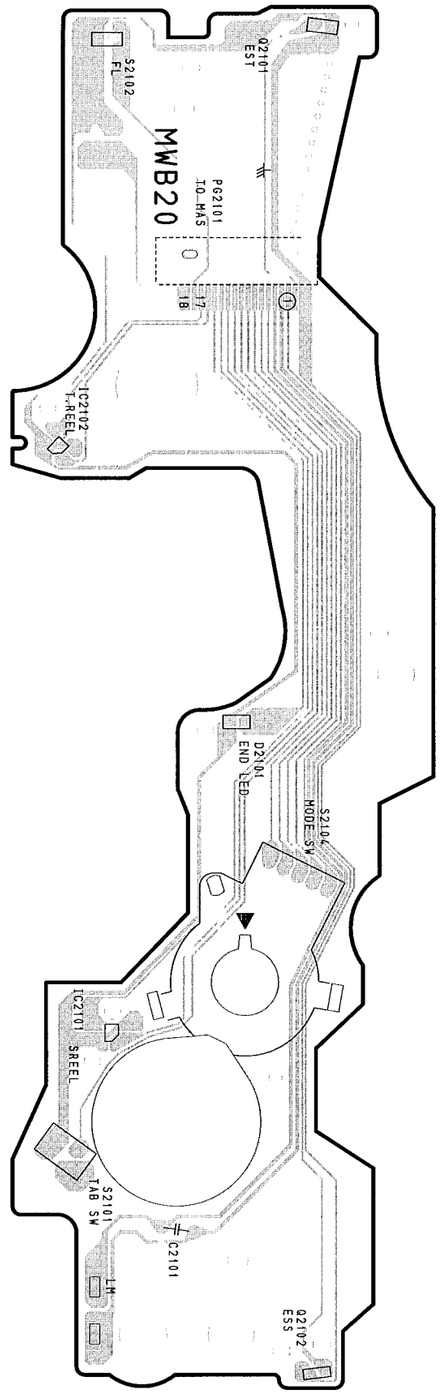


WYC[Y/CHROMA]
[PATTERN No.152198-4]

Note : Parts marked "*" are used exclusively for DIFFERENCE TABLE.



HIFI[Hi-Fi AUDIO]
[PATTERN No.152099-4]



MWB[SENSOR]
[PATTERN No.152018-3]

IDENTIFICATION OF PARTS LOCATION

WYC [Y/CHROMA]

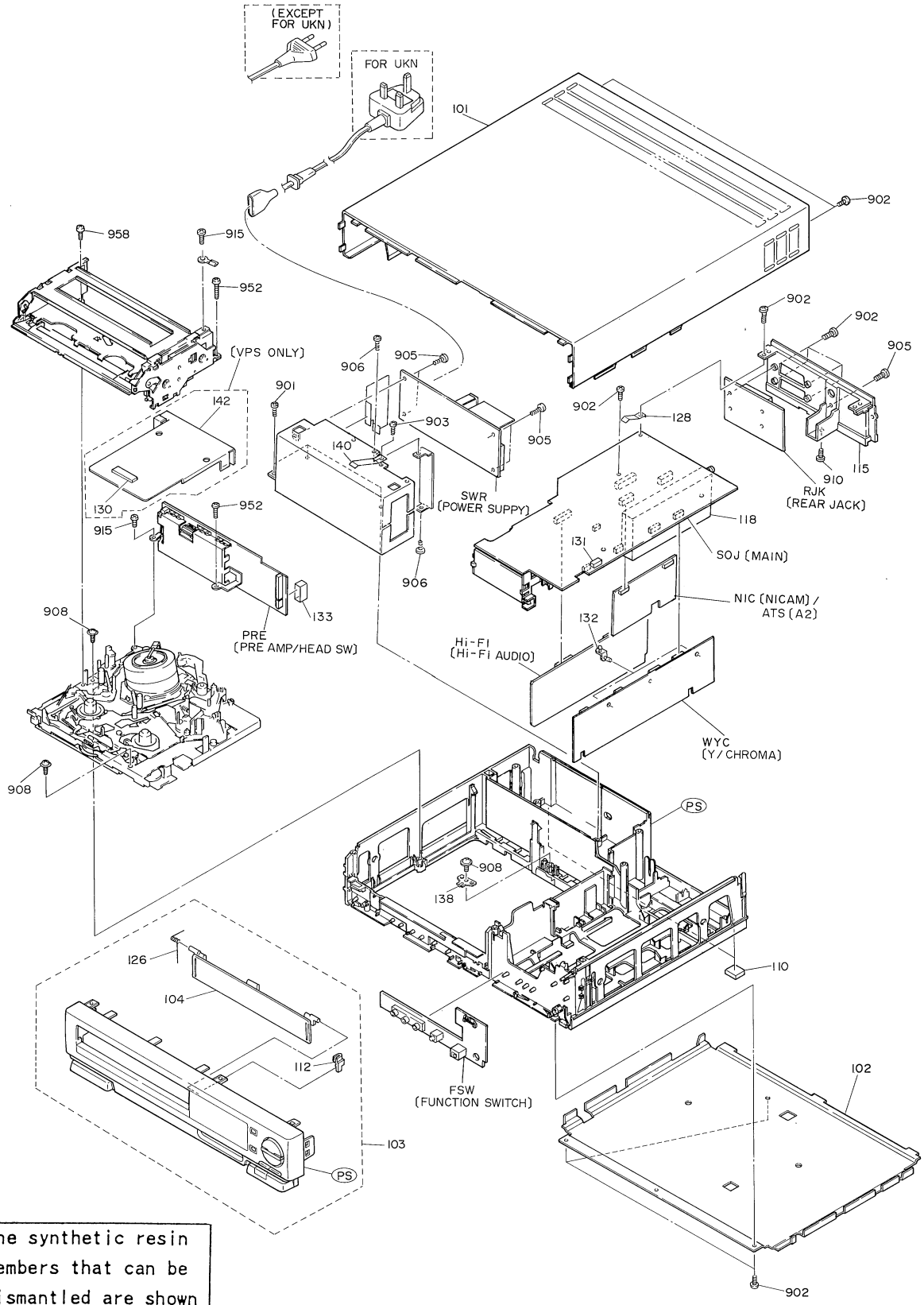
Symbol No.	Parts Location
C	
C201	1A
C202	1A
C203	2A
C204	1A
C205	1A
C207	1B
C208	2B
C209	2C
C210	2B
C211	2C
C212	1C
C213	1C
C214	1C
C215	2D
C216	2D
C217	1D
C218	1D
C219	1D
C220	2D
C221	1D
C222	1D
C223	1D
C224	1D
C225	1D
C226	1E
C227	1C
C228	1E
C229	1E
C230	1E
C231	2D
C232	2E
C233	1C
C234	1E
C235	1E
C236	1E
C237	1E
C238	1E
C239	1C
C240	1C
C241	1B
C242	1C
C243	1C
C245	1D
C246	1D
C250	2D
C251	2D
C284	1D
C285	1B
C301	1A
C302	1A
C303	1A
C304	1B
C305	1A
C306	1A
C307	1B
C308	1B
C309	1C
C310	2C
C311	2C
C312	2C
C313	2C
C315	2C
C316	1C
C319	2C
C320	1C
C322	1A
C324	1A
C326	1C
C327	1A
CN	
CN01	1E
CN02	1E
CP	
CP301	1A
D	
D201	1C
D202	1C
D204	1D
IC	
IC201	1B
IC202	2E
L	
L201	2B
L202	2C
L203	2C
L204	1D
L205	1D
L206	2D
L207	1D
L208	1D
L209	1E
L210	1E
L211	1C
L212	2B
L213	1B
L214	1C
L215	1C
L216	2D
L301	2A
L302	2A
L303	2C
L304	2C
L306	2C
L308	1A
L309	1C
PG	
PG201	2D
PG202	2C
PG203	2B
PG204	2E
Q	
Q201	2D
Q202	1C
Q203	1D
Q204	1D
Q205	2E
Q206	1D
Q207	1C
Q208	1D
Q210	1D
Q211	1C
Q212	2D
Q213	2C
Q214	2C
Q215	2B
Q216	2B
Q217	1D
Q301	2C
Q302	1C
Q303	1C
Q304	2A
Q305	2A
Q306	1B
Q307	1A
Q309	1C
R	
R201	1C
R202	2B
R203	2D
R204	2C
R205	2D
R206	2C
R207	2D
R208	1D
R209	1C
R211	1C
R212	1C
R213	1D
R214	1D
R215	1D
R216	1D
R217	1D
R218	1D
R219	1D
R220	2D
R221	1E
R222	1E
R223	1E
R225	1C
R226	1B
R227	2C
R228	2C
R229	2C
R230	1C
R231	1D
R232	1D
R233	1D
R234	2D
R235	1C
R237	1C
R238	1B
R239	2B
R240	2B
R241	2C
R246	2C
R247	2C
R248	2B
R249	1D
R250	1D
R251	2D
R252	2D
R253	1C
R301	2A
R302	2A
R303	2A
R304	2A
R305	2A
R309	2A
R310	2A
R311	1B
R312	1B
R313	2C
R314	2C
R315	2C
R316	1C
R317	1C
R318	1C
R319	1C
R321	1C
R322	1C
R323	1C
R324	1C
R325	1C
R326	1A
R328	1A
R329	1A
R330	1A
RT	
RT301	2C
X	
X301	1B

HIFI [Hi-Fi AUDIO]

Symbol No.	Parts Location
C	
C401	1F
C402	1F
C403	1F
C404	1F
C405	2E
C406	2E
C407	2E
C409	1F
C410	1F
C412	2D
C413	2E
C414	1F
C415	1E
C416	1E
C418	2D
C420	2E
C421	1F
C422	1E
C424	2D
C501	2D
C503L	2C
C503R	1E
C504L	2D
C504R	1E
C508L	1D
C508R	1E
C509L	1C
C509R	1E
C510L	2D
C510R	1E
C511L	1C
C511R	1D
C512L	1C
C512R	1D
C513	1C
C514L	2D
C514R	1D
C515L	1D
C515R	1D
C516	1D
C517	2D
C518	1C
C519	1D
C521	1D
C522	1B
C523	1D
C524	1D
C525L	1A
C525R	2A
C526	2A
C527	2A
C528L	1A
C528R	2A
C529L	1C
C529R	1C
C530	1E
C531	2A
C532	1A
C534	2D
C536	1D
C537L	2B
C537R	1B
C538	1A
C539	1E
C540	1D
C541L	1C
C541R	1B
D	
D404	2E
D405	1F
D406	1F
D503	2B
D504	1B
IC	
IC401	1E
IC501	1D
IC502	1A
IC503	1C
L	
L401	1F
L402	1E
L403	2A
L502	1D
L503	1D
PG	
PG406	2E
PG501	1B
PG511	2E
PG512	2B
PG513	2D
Q	
Q401	1F
Q402	1F
Q403	2E
Q404	1F
Q406	2F
Q408	2E
Q502	1B
Q503L	1A
Q503R	1B
Q505	1C
Q506	1A
Q509	1B
R	
R401	2E
R402	1F
R404	2E
R405	1E
R406	1E
R407	1F
R408	2D
R409	2E
R410	2E
412	1F
R414	1E
R415	1E
R416	1E
R417	2E
R419	1F
R420	1F
R422	1E
R425	1F
R427	1F
R434	2D
R501	1A
R502L	1B
R502R	1B
R503L	1B
R503R	1B
R504L	1B
R504R	1B
R505L	2C
R505R	1E
R506L	2C
R506R	1E
R507L	1C
R507R	1E
R508L	1C
R508R	1D
R509L	1C
R509R	1D
R511	1C
R513	1C
R514L	2C
R514R	2C
R515L	1D
R515R	1D
R516	1D
R518	1E
R519L	2A
R519R	2A
R520	1A
R521L	1A
R521R	2A
R522L	1A
R522R	1A
R523	1E
R524	1E
R528	1B
R529	1E
R530L	1C
R530R	1E
R531L	1C
R531R	1E
R532L	2D
R532R	1E
R533L	2D
R533R	1E
R537	1D
R538L	1C
RR538R	
1D	
R539	1E
R540L	1C
R540R	1C
R541L	1C
R541R	1C
R542L	1C
R542R	1C
R543L	1C
R543R	1B
R544L	1C
R544R	2C
R545	1A
R547	1B
R553	2B
R555	1B
RT	
RT401	2E
RT501L	2C
RT501R	2C
T	
T401	1F

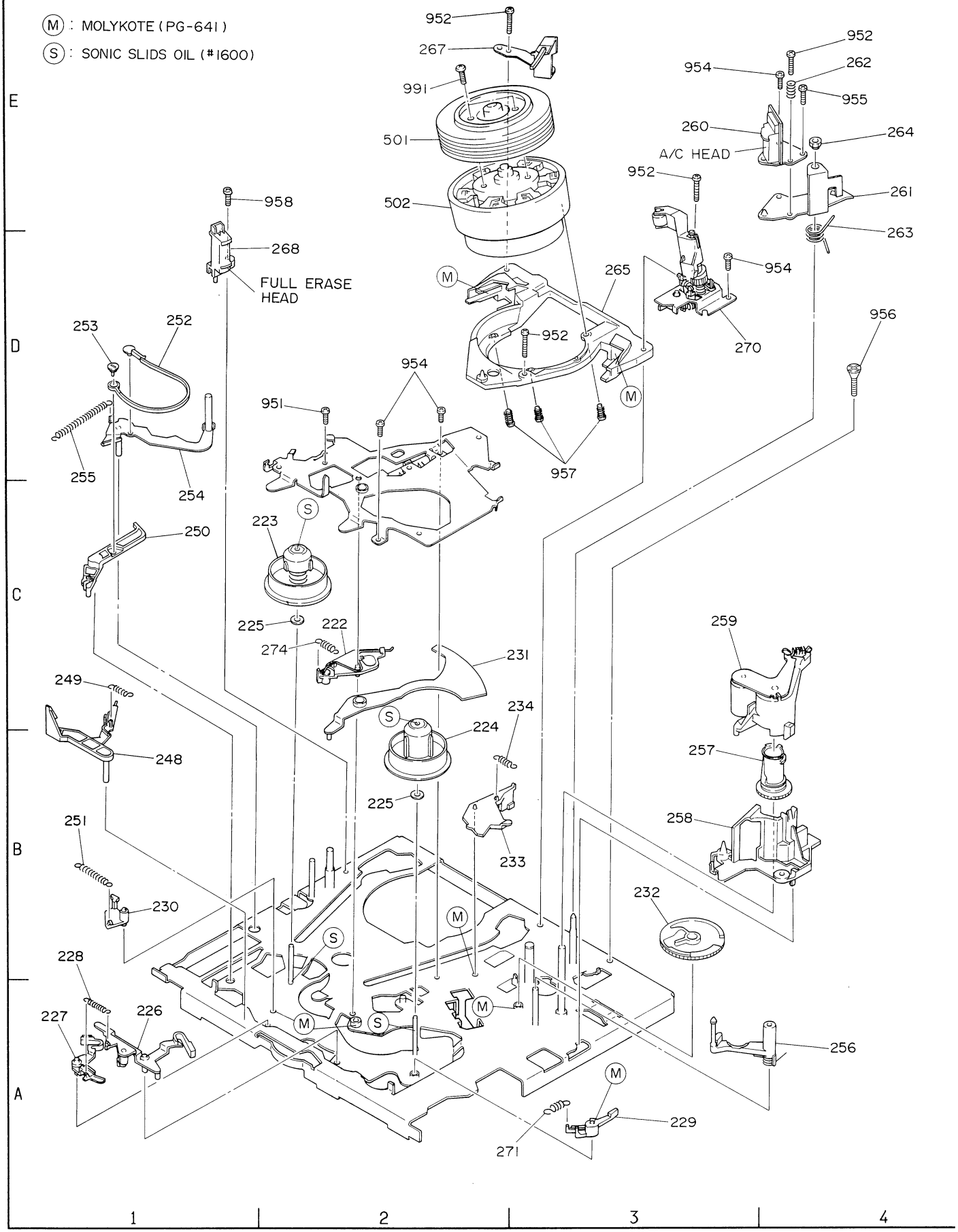
EXPLODED VIEWS

1. CABINET SECTION

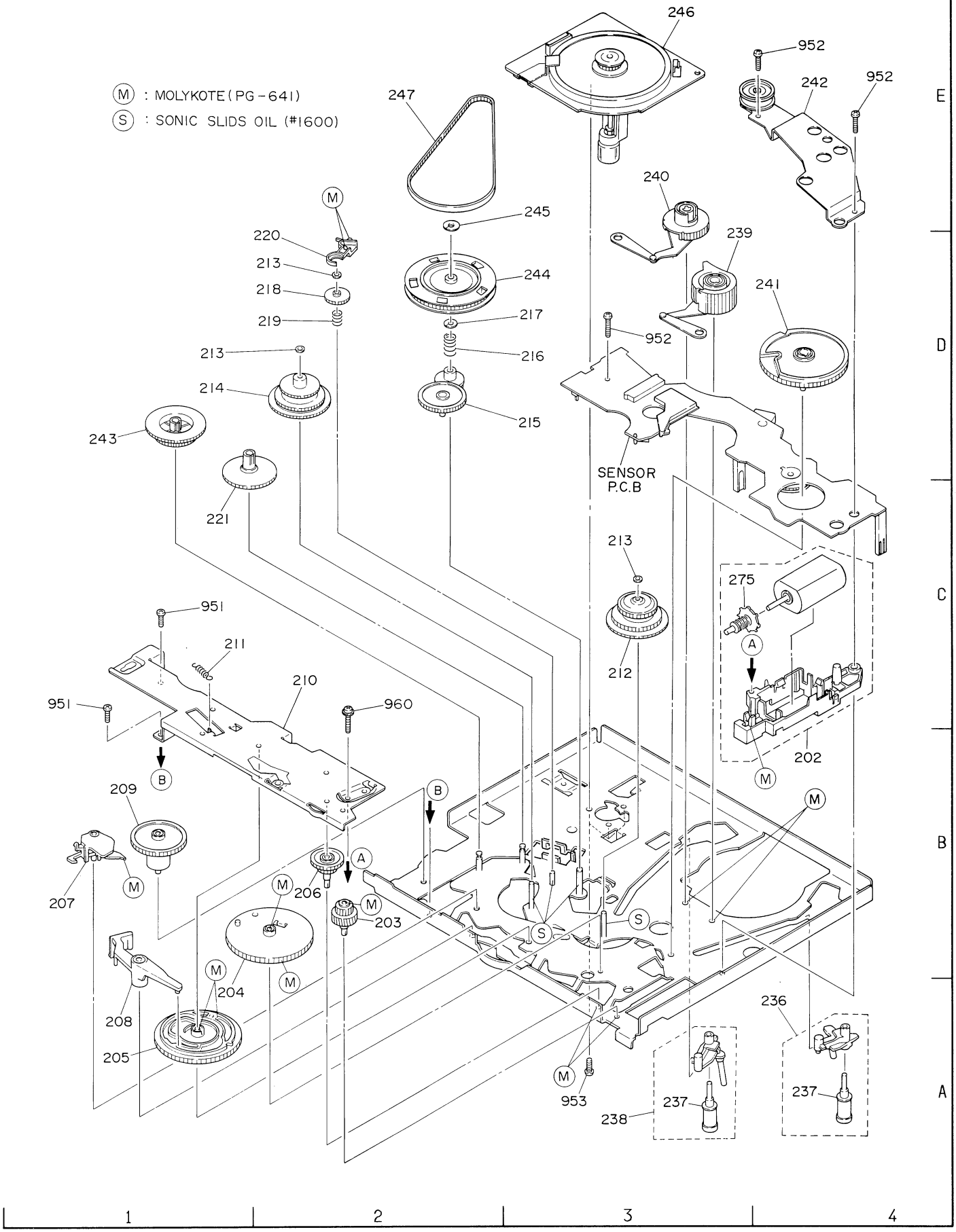


NOTE : The synthetic resin members that can be dismantled are shown by abbreviations using letters.

2. CHASSIS SECTION (TOP VIEW)



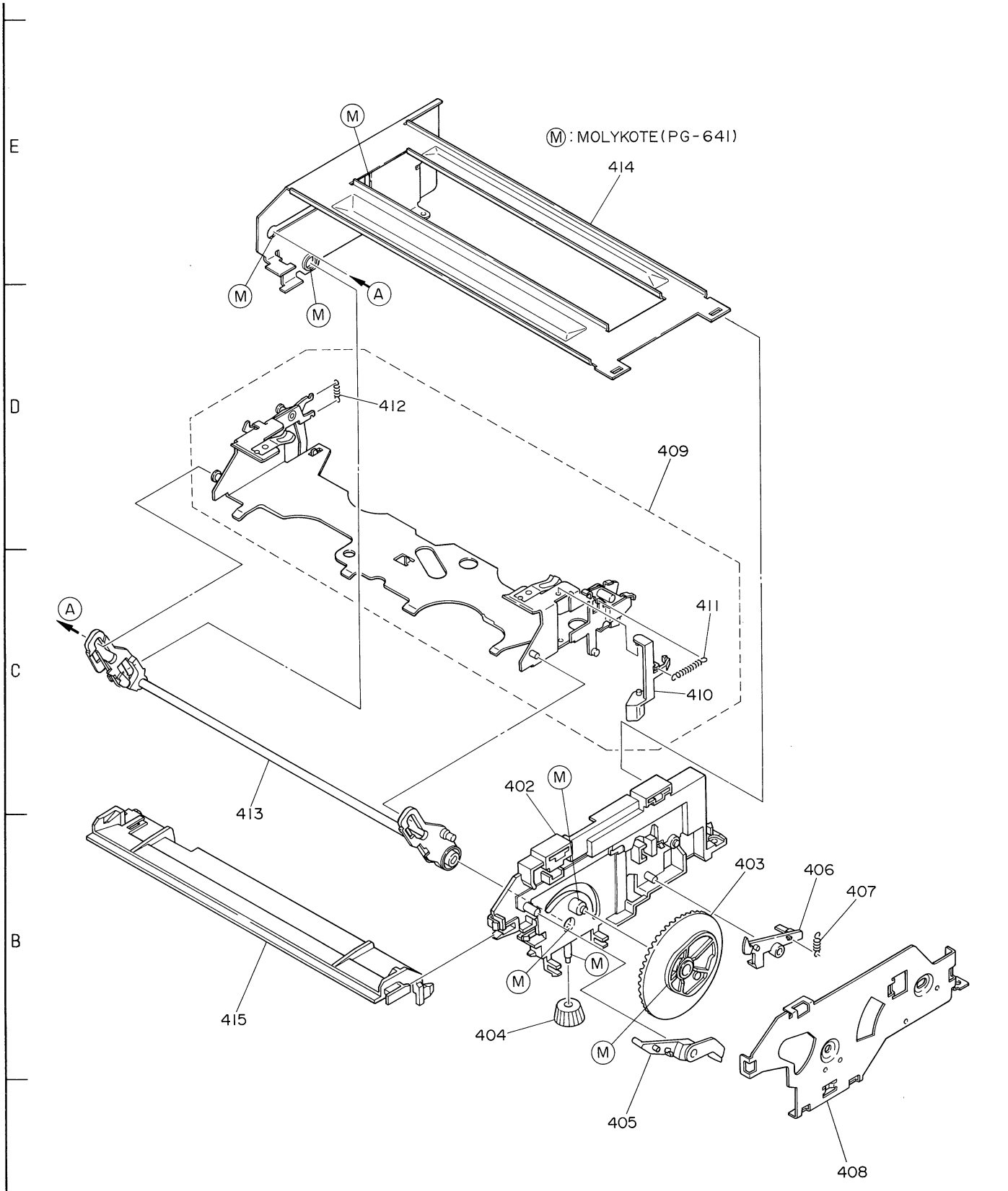
3. CHASSIS SECTION (BOTTOM VIEW)



1 2 3 4

E D C B A

4. CASSETTE LOADING MECHANISM SECTION



REPLACEMENT PARTS LIST
1. MECHANICAL PARTS LIST

Note: This replacement parts list applies to the following model.
Applicable model: VT-F350E (CTN), VT-F351E (CTN)

SYMBOL-NO	P-NO	DESCRIPTION
		FOR FINAL ASSEMBLY
101	6009463	COVER, TOP
102	6009472	COVER, BOTTOM
103	4731633	PANEL, FRONT[F350E]
103	4731635	PANEL, FRONT[F351E]
104	4725404	DOOR, CASSETTE
110	4330711	LEG
112	4590321	STOPPER, DOOR
115	4725462	PANEL, REAR
118	1730401	RF/TUNER IF UNIT
126	6551851	SPRING, DOOR
128	4842811	PLATE
131	6562924	RUBBER
132	6810651	HOLDER, CBA
133	6562928	RUBBER
138	7415793	BRACKET
140	6529132	PLATE
202	6500761	MOTOR, LOADING
203	6441371	GEAR
204	6441392	GEAR
205	6441403	GEAR
206	6441381	GEAR
207	6823133	ARM
208	6823171	ARM, OPERATION
209	6441421	GEAR
210	6500332	PLATE
211	6558551	SPRING
212	6405183	GEAR, LOADING(L)
213	7788347	WASHER
214	6405192	GEAR, LOADING(R)
215	6401445	ARM
216	6522979	SPRING
217	6500841	WASHER
218	6441433	GEAR, CHANGE
219	6522978	SPRING
220	6823183	ARM
221	6441411	GEAR
222	6823314	ARM
223	6416631	REEL, TABLE(S)
224	6416652	REEL, TABLE(T)
225	4583333	WASHER
226	6823195	ARM, BRAKE(R)
227	6823229	ARM, BRAKE(L)
228	6318613	SPRING
229	6823271	BRAKE
230	6823261	BRAKE
231	6500414	ARM
232	6823251	GEAR
233	6823292	BRAKE
234	6558452	SPRING
236	6638942	BASE, GUIDE ROLLER(I)
237	4589381	GUIDE ROLLER
238	6638954	BASE, GUIDE ROLLER(O)
239	6500505	GEAR, LOADING(L)
240	6500464	GEAR, LOADING(R)
241	6823537	GEAR, MODE
242	6500549	BRACKET
243	6823542	GEAR
244	6823333	PULLY
245	6500841	WASHER
246	1470084	DC MOTOR
247	6358101	BELT
248	6823424	ARM
249	6553361	SPRING
250	6823435	ARM
251	6553301	SPRING
252	6823473	BAND, TENSION
253	6823511	SHAFT
254	6500684	ARM, TENSION
255	6553352	SPRING
256	6638936	ARM
257	6823521	GEAR, CAM
258	6823445	BRACKET
259	6500432	ROLLER, PRESSURE
260	5434152	HEAD
261	6500593	BASE, AC HEAD
262	6304906	SPRING
263	6553151	SPRING
264	7785673	NUT
265	6638903	BASE, CYLINDER
267	5794062	BRUSH
268	5423081	HEAD, FULL ERASE
270	6500705	BRACKET
271	6558502	SPRING
274	6320576	SPRING
275	6816211	WORM
402	6823612	BRACKET
403	6823621	GEAR
404	6823631	GEAR
405	6823642	ARM
406	6823652	ARM
407	6558531	SPRING
408	6500612	BRACKET
409	6500623	HOLDER
410	6823691	ARM
411	6558541	SPRING
412	6558561	SPRING
413	6823663	ARM
414	6500671	BRACKET
415	6823701	HOLDER
501	5435701	CYLINDER, UPPER (CY-G5P1)
502	5435691	CYLINDER, ASSY (CY-G5P1)
901	8699410	SCREW(3X10)
902	8699412	SCREW (3X12) BLACK
903	8741406	SCREW(3X6)
905	8611406	SCREW(3X6)
906	8741406	SCREW(3X6)
908	7781138	SCREW(3X10BT)
910	8699406	SCREW (3X6)
915	0671305	DT SCREW-2.6MMDX5MM
951	0711304	SCREW(2.6X4)
952	0711312	PAN HEAD SCREW - 2.6MMD X 12MM
953	8691306	BT SCREW 2.6MM
954	0711306	PAN HEAD SCREW-2.6MMDX6MM
955	7773741	SCREW
956	4528181	SCREW
957	7775582	SCREW
958	0671308	DT SCREW-2.6MMDX8MM
960	8650914	SCREW(2.6X14)
991	7784131	SCREW(3X8)
		FOR ACCESSORIES
802	5616564	REMOTE HAND SET
803	5858311	CONNECTION CORD
804	PH10161	JACK COVER

2. ELECTRICAL PARTS LIST

Note: This replacement parts list applies to the following model.
Applicable model: VT-F350E (CTN), VT-F351E (CTN)

SYMBOL-NO	P-NO	DESCRIPTION
		CAPACITORS
C1401	0800038	ELECTROLYTIC 47UF 6.3V
C1402	0890045	CERAMIC DISC 0.047UF+80-20% 50V
C1404	0800003	ELECTROLYTIC 1UF 50V
C1405	0890121	CERAMIC DISC 33PF+-5% 50V
C1406	0890118	CERAMIC DISC 22PF+-5% 50V
C1407	0890112	CERAMIC CHIP 8PF+-0.5% 50V
C1408	0890112	CERAMIC CHIP 8PF+-0.5% 50V
C1411	0800009	ELECTROLYTIC 4.7UF 25V
C1441	0800047	ELECTROLYTIC 100UF 6.3V
C1442	0890022	CERAMIC DISC 100PF+-10% 50V
C1443	0880005	POLYESTER FILM 2200PF+-10% 50V
C1444	0800003	ELECTROLYTIC 1UF 50V
C1451	0890031	CERAMIC DISC 470PF+-10% 50V
C1452	0800015	ELECTROLYTIC 10UF 16V
C1503L	0800015	ELECTROLYTIC 10UF 16V
C1503R	0800015	ELECTROLYTIC 10UF 16V
C1505	0800015	ELECTROLYTIC 10UF 16V
C1507	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C1508	0207406	ELECTROLYTIC 10UF 10V
C1509	0207406	ELECTROLYTIC 10UF 10V
C1510	0890043	CERAMIC DISC 0.01UF+-20% 16V
C1512	0800041	ELECTROLYTIC 47UF 16V
C1515	0207406	ELECTROLYTIC 10UF 10V
C1516	0207455	ELECTROLYTIC 33UF 16V
C1519	0890015	CERAMIC DISC 33PF+-50% 50V
C1520	0800072	ELECTROLYTIC 470UF 6.3V
C1521	0890017	CERAMIC DISC 47PF+-5% 50V
C1522	0800032	ELECTROLYTIC 33UF 16V
C1523	0890043	CERAMIC DISC 0.01UF+-20% 16V
C1524	0800057	ELECTROLYTIC 220UF 10V
C1525	0800038	ELECTROLYTIC 47UF 6.3V
C1526	0890043	CERAMIC DISC 0.01UF+-20% 16V
C1527	0890045	CERAMIC DISC 0.047UF+80-20% 50V
C1528	0890045	CERAMIC DISC 0.047UF+80-20% 50V
C1529	0800044	ELECTROLYTIC 47UF 50V
C1530	0800015	ELECTROLYTIC 10UF 16V
C1532	0800048	ELECTROLYTIC 100UF 10V
C1533	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C1536	0800041	ELECTROLYTIC 47UF 16V
C1541	0800105	ELECTROLYTIC 0.33UF 50V
C1542	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C1801	0890043	CERAMIC DISC 0.01UF+-20% 16V
C1802	0800138	ELECTROLYTIC 47UF 6.3V
C1803	0890031	CERAMIC DISC 470PF+-10% 50V
C1804	0890118	CERAMIC DISC 22PF+-5% 50V
C1805	0890043	CERAMIC DISC 0.01UF+-20% 16V
C1806	0890043	CERAMIC DISC 0.01UF+-20% 16V
C1807	0890043	CERAMIC DISC 0.01UF+-20% 16V
C1808	0800015	ELECTROLYTIC 10UF 16V
C1810	0890035	CERAMIC DISC 1000PF+-10% 50V
C1812	0890035	CERAMIC DISC 1000PF+-10% 50V
C1813	0800041	ELECTROLYTIC 47UF 16V
C1814	0800041	ELECTROLYTIC 47UF 16V
C1817	0800122	ELECTROLYTIC 10UF 16V
C1818	0800128	ELECTROLYTIC 22UF 16V
C1821	0800122	ELECTROLYTIC 10UF 16V
C1822	0800128	ELECTROLYTIC 22UF 16V
C1823	0800141	ELECTROLYTIC 47UF 16V
C1824	0800118	ELECTROLYTIC 4.7UF 35V
C1825	0800141	ELECTROLYTIC 47UF 16V
C1826	0890043	CERAMIC DISC 0.01UF+-20% 16V
C1827	0800138	ELECTROLYTIC 47UF 6.3V
C1828	0890043	CERAMIC DISC 0.01UF+-20% 16V
C1829	0800015	ELECTROLYTIC 10UF 16V
C1830	0800015	ELECTROLYTIC 10UF 16V
C1831	0800003	ELECTROLYTIC 1UF 50V
C1832	0800109	ELECTROLYTIC 1.0UF 50V
C1833	0890035	CERAMIC DISC 1000PF+-10% 50V
C201	0800072	ELECTROLYTIC 470UF 6.3V
C202	0890102	CERAMIC DISC 0.022UF+80-20% 50V
C203	0800015	ELECTROLYTIC 10UF 16V
C204	0890102	CERAMIC DISC 0.022UF+80-20% 50V
C205	0800015	ELECTROLYTIC 10UF 16V
C207	0800003	ELECTROLYTIC 1UF 50V
C208	0890016	CERAMIC DISC 39PF+-50% 50V
C209	0890018	CERAMIC DISC 56PF+-50% 50V
C210	0890013	CERAMIC DISC 22PF+-5% 50V
C2101	0890045	CERAMIC DISC 0.047UF+80-20% 50V
C211	0890043	CERAMIC DISC 0.01UF+-20% 16V
C212	0890018	CERAMIC DISC 56PF+-50% 50V
C213	0890009	CERAMIC DISC 12PF+-5% 50V
C214	0890017	CERAMIC DISC 47PF+-5% 50V
C215	0890018	CERAMIC DISC 56PF+-50% 50V
C216	0890005	CERAMIC DISC 4.7PF 50V
C217	0890019	CERAMIC DISC 68PF+-50% 50V
C218	0890043	CERAMIC DISC 0.01UF+-20% 16V
C219	0890021	CERAMIC DISC 82PF+-10% 50V
C220	0890027	CERAMIC DISC 270PF+-10% 50V
C221	0890012	CERAMIC DISC 18PF+-5% 50V
C222	0890022	CERAMIC DISC 100PF+-10% 50V
C223	0890006	CERAMIC DISC 6.8PF+-10% 50V
C224	0890013	CERAMIC DISC 22PF+-5% 50V
C225	0890043	CERAMIC DISC 0.01UF+-20% 16V
C226	0207456	ELECTROLYTIC 1UF 50V
C227	0890013	CERAMIC DISC 22PF+-5% 50V
C228	0800003	ELECTROLYTIC 1UF 50V
C229	0890043	CERAMIC DISC 0.01UF+-20% 16V
C230	0800003	ELECTROLYTIC 1UF 50V
C231	0800038	ELECTROLYTIC 47UF 6.3V
C232	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C233	0890015	CERAMIC DISC 33PF+-50% 50V
C234	0890014	CERAMIC DISC 27PF+-50% 50V
C235	0890013	CERAMIC DISC 22PF+-5% 50V
C236	0890015	CERAMIC DISC 33PF+-50% 50V
C237	0890018	CERAMIC DISC 56PF+-50% 50V
C238	0800015	ELECTROLYTIC 10UF 16V
C239	0890033	CERAMIC DISC 680PF+-10% 50V
C240	0890026	CERAMIC DISC 220PF+-10% 50V
C241	0800015	ELECTROLYTIC 10UF 16V
C242	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C243	0800038	ELECTROLYTIC 47UF 6.3V
C245	0890025	CERAMIC DISC 180PF+-10% 50V
C246	0890043	CERAMIC DISC 0.01UF+-20% 16V
C250	0890043	CERAMIC DISC 0.01UF+-20% 16V
C251	0890043	CERAMIC DISC 0.01UF+-20% 16V
C284	0890045	CERAMIC DISC 0.047UF+80-20% 50V
C285	0890045	CERAMIC DISC 0.047UF+80-20% 50V
C301	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C302	0800038	ELECTROLYTIC 47UF 6.3V
C303	0800003	ELECTROLYTIC 1UF 50V
C304	0800003	ELECTROLYTIC 1UF 50V
C305	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C306	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C307	0800003	ELECTROLYTIC 1UF 50V
C308	0800003	ELECTROLYTIC 1UF 50V
C309	0890102	CERAMIC DISC 0.022UF+80-20% 50V
C310	0890043	CERAMIC DISC 0.01UF+-20% 16V

SYMBOL-NO	P-NO	DESCRIPTION
C311	0890043	CERAMIC DISC 0.01UF+-20% 16V
C312	0880017	POLYESTER FILM 0.15UF+-10% 50V
C313	0890028	CERAMIC DISC 330PF+-10% 50V
C315	0890023	CERAMIC DISC 120PF+-10% 50V
C316	0890043	CERAMIC DISC 0.01UF+-20% 16V
C319	0890043	CERAMIC DISC 0.01UF+-20% 16V
C320	0890043	CERAMIC DISC 0.01UF+-20% 16V
C322	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C324	0890012	CERAMIC DISC 18PF+-5% 50V
C326	0890027	CERAMIC DISC 270PF+-10% 50V
C327	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C3501	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C3502	0890035	CERAMIC DISC 1000PF+-10% 50V
C3503	0890035	CERAMIC DISC 1000PF+-10% 50V
C401	0800032	ELECTROLYTIC 33UF 16V
C402	0890038	CERAMIC DISC 3300PF+-20% 16V
C403	0890043	CERAMIC DISC 0.01UF+-20% 16V
C404	0268449	MYLAR 0.047UF+-5% 100V
C405	0890026	CERAMIC DISC 220PF+-10% 50V
C406	0890043	CERAMIC DISC 0.01UF+-20% 16V
C407	0800041	ELECTROLYTIC 47UF 16V
C410	0209643	CERAMIC DISC 0.022UF+-10% 16V
C412	0890034	CERAMIC DISC 820PF+-10% 5V
C413	0890096	CERAMIC DISC 4700PF+-10% 25V
C414	0207461	ELECTROLYTIC 22UF 16V
C415	0209642	CERAMIC DISC 15000PF+-10% 16V
C416	0800015	ELECTROLYTIC 10UF 16V
C418	0800015	ELECTROLYTIC 10UF 16V
C420	0800122	ELECTROLYTIC 10UF 16V
C421	0800122	ELECTROLYTIC 10UF 16V
C422	0890035	CERAMIC DISC 1000PF+-10% 50V
C424	0890017	CERAMIC DISC 47PF+-5% 50V
C4501	0890035	CERAMIC DISC 1000PF+-10% 50V
C4502	0890035	CERAMIC DISC 1000PF+-10% 50V
C4503	0890035	CERAMIC DISC 1000PF+-10% 50V
C4504	0890035	CERAMIC DISC 1000PF+-10% 50V
C4505	0890035	CERAMIC DISC 1000PF+-10% 50V
C4506	0890035	CERAMIC DISC 1000PF+-10% 50V
C4507	0890035	CERAMIC DISC 1000PF+-10% 50V
C4508	0890035	CERAMIC DISC 1000PF+-10% 50V
C4510	0800138	ELECTROLYTIC 47UF 6.3V
C4511	0800138	ELECTROLYTIC 47UF 6.3V
C501	0800048	ELECTROLYTIC 100UF 10V
C503L	0800118	ELECTROLYTIC 4.7UF 35V
C503R	0800118	ELECTROLYTIC 4.7UF 35V
C504L	0800118	ELECTROLYTIC 4.7UF 35V
C504R	0800118	ELECTROLYTIC 4.7UF 35V
C508L	0800032	ELECTROLYTIC 33UF 16V
C508R	0800032	ELECTROLYTIC 33UF 16V
C509L	0209645	CERAMIC DISC 47000PF+-10% 16V
C509R	0209645	CERAMIC DISC 47000PF+-10% 16V
C510L	0800112	ELECTROLYTIC 2.2UF 50V
C510R	0800112	ELECTROLYTIC 2.2UF 50V
C511L	0800039	ELECTROLYTIC 47UF 10V
C511R	0800039	ELECTROLYTIC 47UF 10V
C512L	0209642	CERAMIC DISC 15000PF+-10% 16V
C512R	0209642	CERAMIC DISC 15000PF+-10% 16V
C513	0800022	ELECTROLYTIC 22UF 10V
C514L	0209641	CERAMIC DISC 10000PF+-10% 16V
C514R	0209641	CERAMIC DISC 10000PF+-10% 16V
C515L	0890035	CERAMIC DISC 1000PF+-10% 50V
C515R	0890035	CERAMIC DISC 1000PF+-10% 50V
C516	0800047	ELECTROLYTIC 100UF 6.3V
C517	0800015	ELECTROLYTIC 10UF 16V
C518	0890043	CERAMIC DISC 0.01UF+-20% 16V

SYMBOL-NO	P-NO	DESCRIPTION
C519	0890101	CERAMIC DISC 0.01UF+-20% 16V
C521	0800047	ELECTROLYTIC 100UF 6.3V
C522	0890043	CERAMIC DISC 0.01UF+-20% 16V
C523	0880018	POLYESTER FILM 0.22UF+-10% 50V
C524	0890027	CERAMIC DISC 270PF+-10% 50V
C525L	0800118	ELECTROLYTIC 4.7UF 35V
C525R	0800118	ELECTROLYTIC 4.7UF 35V
C526	0890043	CERAMIC DISC 0.01UF+-20% 16V
C527	0800039	ELECTROLYTIC 47UF 10V
C528L	0800118	ELECTROLYTIC 4.7UF 35V
C528R	0800118	ELECTROLYTIC 4.7UF 35V
C529L	0800011	ELECTROLYTIC 4.7UF 35V
C529R	0800011	ELECTROLYTIC 4.7UF 35V
C530	0800041	ELECTROLYTIC 47UF 16V
C531	0800122	ELECTROLYTIC 10UF 16V
C532	0890039	CERAMIC DISC 4700PF+-20% 16V
C534	0800048	ELECTROLYTIC 100UF 10V
C536	0800015	ELECTROLYTIC 10UF 16V
C537L	0800118	ELECTROLYTIC 4.7UF 35V
C537R	0800118	ELECTROLYTIC 4.7UF 35V
C538	0800011	ELECTROLYTIC 4.7UF 35V
C539	0800118	ELECTROLYTIC 4.7UF 35V
C541L	0800015	ELECTROLYTIC 10UF 16V
C541R	0800015	ELECTROLYTIC 10UF 16V
C601	0880011	POLYESTER FILM 0.015UF+-10% 50V
C602	0800005	ELECTROLYTIC 2.2UF 50V
C603	0207456	ELECTROLYTIC 1UF 50V
C604	0207459	ELECTROLYTIC 0.47UF 50V
C605	0800122	ELECTROLYTIC 10UF 16V
C607	0800122	ELECTROLYTIC 10UF 16V
C609	0207401	ELECTROLYTIC 0.33UF 50V
C610	0880004	POLYESTER FILM 1500PF+-10% 50V
C611	0890035	CERAMIC DISC 1000PF+-10% 50V
C612	0800029	ELECTROLYTIC 33UF 6.3V
C613	0800015	ELECTROLYTIC 10UF 16V
C614	0800005	ELECTROLYTIC 2.2UF 50V
C617	0880048	MYLAR 0.022UF+-10% 50V
C619	0890101	CERAMIC DISC 0.01UF+-20% 16V
C620	0880013	POLYESTER FILM 0.033UF+-10% 50V
C621	0890013	CERAMIC DISC 22PF+-5% 50V
C624	0890038	CERAMIC DISC 3300PF+-20% 16V
C625	0800022	ELECTROLYTIC 22UF 10V
C626	0890046	CERAMIC DISC 0.1UF+80-20% 50V
C632	0890045	CERAMIC DISC 0.047UF+80-20% 50V
C634	0890043	CERAMIC DISC 0.01UF+-20% 16V
C635	0880055	MYLAR 0.068UF+-10% 50V
C641	0890046	CERAMIC DISC 0.1UF+80-20% 50V
C651	0800022	ELECTROLYTIC 22UF 10V
C652	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C653	0800015	ELECTROLYTIC 10UF 16V
C654	0800015	ELECTROLYTIC 10UF 16V
C655	0890023	CERAMIC DISC 120PF+-10% 50V
C656	0890028	CERAMIC DISC 330PF+-10% 50V
C801	0890046	CERAMIC DISC 0.1UF+80-20% 50V
C803	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C805	0890045	CERAMIC DISC 0.047UF+80-20% 50V
C806	0890024	CERAMIC DISC 150PF+-10% 50V
C807	0890043	CERAMIC DISC 0.01UF+-20% 16V
C808	0890043	CERAMIC DISC 0.01UF+-20% 16V
C809	0800038	ELECTROLYTIC 47UF 6.3V
C810	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C811	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C812	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C813	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C814	0890044	CERAMIC DISC 0.022UF+80-20% 25V

SYMBOL-NO	P-NO	DESCRIPTION
C822L	0800015	ELECTROLYTIC 10UF 16V
C822R	0800015	ELECTROLYTIC 10UF 16V
C823L	0800015	ELECTROLYTIC 10UF 16V
C823R	0800015	ELECTROLYTIC 10UF 16V
C844	0800015	ELECTROLYTIC 10UF 16V
C846	0800038	ELECTROLYTIC 47UF 6.3V
C848	0800022	ELECTROLYTIC 22UF 10V
C902	0890046	CERAMIC DISC 0.1UF+80-20% 50V
C903	0800038	ELECTROLYTIC 47UF 6.3V
C904	0217516	CAPACITOR 0.047F+80-20% 5.5V
C905	0800005	ELECTROLYTIC 2.2UF 50V
C906	0890046	CERAMIC DISC 0.1UF+80-20% 50V
C908	0890118	CERAMIC DISC 22PF+-5% 50V
C909	0890118	CERAMIC DISC 22PF+-5% 50V
C911	0800044	ELECTROLYTIC 47UF 50V
C914	0208379	CERAMIC DISC 0.01UF+-30% 16V
C915	0208379	CERAMIC DISC 0.01UF+-30% 16V
C916	0208379	CERAMIC DISC 0.01UF+-30% 16V
C917	0208379	CERAMIC DISC 0.01UF+-30% 16V
C918	0800032	ELECTROLYTIC 33UF 16V
C919	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C920	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C922	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C926	0890046	CERAMIC DISC 0.1UF+80-20% 50V
		RESISTORS
R1401	0700053	CARBON FILM 8.2KOHM+-5% 1/8W
R1402	0700053	CARBON FILM 8.2KOHM+-5% 1/8W
R1411	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R1412	0700044	CARBON FILM 1.8KOHM+-5% 1/8W
R1414	0700027	CARBON FILM 100 OHM+-5% 1/8W
R1415	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R1441	0101733	METAL FILM 16.5KOHM+-1% 1/8W
R1442	0101736	METAL FILM 120KOHM+-1% 1/8W
R1443	0700076	CARBON FILM 470KOHM+-5% 1/8W
R1444	0700062	CARBON FILM 39KOHM+-5% 1/8W
R1451	0700027	CARBON FILM 100 OHM+-5% 1/8W
R1452	0700034	CARBON FILM 330OHM+-5% 1/8W
R1453	0700036	CARBON FILM 470 OHM+-5% 1/8W
R1454	0700037	CARBON FILM 560OHM+-5% 1/8W
R1505	0700028	CARBON FILM 120OHM+-5% 1/8W
R1506	0700028	CARBON FILM 120OHM+-5% 1/8W
R1509	0700058	CARBON FILM 22KOHM+-5% 1/8W
R1510	0700028	CARBON FILM 120OHM+-5% 1/8W
R1511	0700053	CARBON FILM 8.2KOHM+-5% 1/8W
R1512	0101400	CARBON FILM 75OHM+-5% 1/8W
R1513	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R1514	0700029	CARBON FILM 150 OHM+-5% 1/8W
R1515	0700031	CARBON FILM 180OHM+-5% 1/8W
R1516	0700043	CARBON FILM 1.5KOHM+-5% 1/8W
R1517	0700075	CARBON FILM 390KOHM+-5% 1/8W
R1518	0700075	CARBON FILM 390KOHM+-5% 1/8W
R1519	0700067	CARBON FILM 100KOHM+-5% 1/8W
R1520	0700057	CARBON FILM 18KOHM+-5% 1/8W
R1522	0700044	CARBON FILM 1.8KOHM+-5% 1/8W
R1523	0700032	CARBON FILM 220 OHM+-5% 1/8W
R1524	0700042	CARBON FILM 1.2KOHM+-5% 1/8W
R1526	0700054	CARBON FILM 10KOHM+-5% 1/8W
R1527	0101841	CARBON FILM 4.7KOHM+-5% 1/4W
R1528	0700042	CARBON FILM 1.2KOHM+-5% 1/8W
R1530	0700067	CARBON FILM 100KOHM+-5% 1/8W
R1532	0700063	CARBON FILM 47KOHM+-5% 1/8W
R1533	0700063	CARBON FILM 47KOHM+-5% 1/8W
R1534L	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R1534R	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R1535L	0700047	CARBON FILM 3.3KOHM+-5% 1/8W
R1535R	0700047	CARBON FILM 3.3KOHM+-5% 1/8W
R1536	0700067	CARBON FILM 100KOHM+-5% 1/8W
R1802	0700054	CARBON FILM 10KOHM+-5% 1/8W
R1805	0700046	CARBON FILM 2.7KOHM+-5% 1/8W
R1807	0700046	CARBON FILM 2.7KOHM+-5% 1/8W
R1809	0700047	CARBON FILM 3.3KOHM+-5% 1/8W
R1810	0700044	CARBON FILM 1.8KOHM+-5% 1/8W
R1811	0700057	CARBON FILM 18KOHM+-5% 1/8W
R1812	0700054	CARBON FILM 10KOHM+-5% 1/8W
R1814	0700054	CARBON FILM 10KOHM+-5% 1/8W
R1815	0700047	CARBON FILM 3.3KOHM+-5% 1/8W
R1816	0700044	CARBON FILM 1.8KOHM+-5% 1/8W
R1817	0700057	CARBON FILM 18KOHM+-5% 1/8W
R1818	0700054	CARBON FILM 10KOHM+-5% 1/8W
R1820	0700054	CARBON FILM 10KOHM+-5% 1/8W
R1821	0700058	CARBON FILM 22KOHM+-5% 1/8W
R1822	0700064	CARBON FILM 56KOHM+-5% 1/8W
R1823	0700054	CARBON FILM 10KOHM+-5% 1/8W
R1824	0700059	CARBON FILM 27KOHM+-5% 1/8W
R1825	0700026	CARBON FILM 82OHM+-5% 1/8W
R1826	0700053	CARBON FILM 8.2KOHM+-5% 1/8W
R1827	0700031	CARBON FILM 180OHM+-5% 1/8W
R1828	0700026	CARBON FILM 82OHM+-5% 1/8W
R1829	0700067	CARBON FILM 100KOHM+-5% 1/8W
R1835	0700021	CARBON FILM 33 OHM+-5% 1/8W
R1836	0700027	CARBON FILM 100 OHM+-5% 1/8W
R1837	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R201	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R202	0700057	CARBON FILM 18KOHM+-5% 1/8W
R203	0700036	CARBON FILM 470 OHM+-5% 1/8W
R204	0700046	CARBON FILM 2.7KOHM+-5% 1/8W
R205	0700046	CARBON FILM 2.7KOHM+-5% 1/8W
R206	0700036	CARBON FILM 470 OHM+-5% 1/8W
R207	0700036	CARBON FILM 470 OHM+-5% 1/8W
R208	0700036	CARBON FILM 470 OHM+-5% 1/8W
R209	0700039	CARBON FILM 820OHM+-5% 1/8W
R211	0700036	CARBON FILM 470 OHM+-5% 1/8W
R212	0700037	CARBON FILM 560OHM+-5% 1/8W
R213	0700033	CARBON FILM 270OHM+-5% 1/8W
R214	0700027	CARBON FILM 100 OHM+-5% 1/8W
R215	0700032	CARBON FILM 220 OHM+-5% 1/8W
R216	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R217	0700046	CARBON FILM 2.7KOHM+-5% 1/8W
R218	0700043	CARBON FILM 1.5KOHM+-5% 1/8W
R219	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R220	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R221	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R222	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R223	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R225	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R226	0700053	CARBON FILM 8.2KOHM+-5% 1/8W
R227	0700032	CARBON FILM 220 OHM+-5% 1/8W
R228	0700052	CARBON FILM 6.8KOHM+-5% 1/8W
R229	0700059	CARBON FILM 27KOHM+-5% 1/8W
R230	0700035	CARBON FILM 390OHM+-5% 1/8W
R231	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R232	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R233	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R234	0700048	CARBON FILM 3.9KOHM+-5% 1/8W
R235	0700067	CARBON FILM 100KOHM+-5% 1/8W
R237	0700055	CARBON FILM 12KOHM+-5% 1/8W
R238	0700055	CARBON FILM 12KOHM+-5% 1/8W
R239	0700054	CARBON FILM 10KOHM+-5% 1/8W

SYMBOL-NO	P-NO	DESCRIPTION
R240	0700054	CARBON FILM 10KOHM+-5% 1/8W
R241	0700043	CARBON FILM 1.5KOHM+-5% 1/8W
R246	0700054	CARBON FILM 10KOHM+-5% 1/8W
R247	0700054	CARBON FILM 10KOHM+-5% 1/8W
R248	0700039	CARBON FILM 8200HM+-5% 1/8W
R249	0700054	CARBON FILM 10KOHM+-5% 1/8W
R250	0700043	CARBON FILM 1.5KOHM+-5% 1/8W
R251	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R252	0700036	CARBON FILM 470 OHM+-5% 1/8W
R253	0700028	CARBON FILM 1200HM+-5% 1/8W
R301	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R302	0700054	CARBON FILM 10KOHM+-5% 1/8W
R303	0700054	CARBON FILM 10KOHM+-5% 1/8W
R304	0700039	CARBON FILM 8200HM+-5% 1/8W
R305	0700029	CARBON FILM 150 OHM+-5% 1/8W
R309	0700033	CARBON FILM 2700HM+-5% 1/8W
R310	0700042	CARBON FILM 1.2KOHM+-5% 1/8W
R311	0700056	CARBON FILM 15KOHM+-5% 1/8W
R312	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R313	0700056	CARBON FILM 15KOHM+-5% 1/8W
R314	0700061	CARBON FILM 33KOHM+-5% 1/8W
R315	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R316	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R317	0700042	CARBON FILM 1.2KOHM+-5% 1/8W
R318	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R319	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R321	0700055	CARBON FILM 12KOHM+-5% 1/8W
R322	0700055	CARBON FILM 12KOHM+-5% 1/8W
R323	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R324	0700036	CARBON FILM 470 OHM+-5% 1/8W
R325	0700049	CARBON FILM 4.7KOHM+-5% 1/8W
R326	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R328	0700061	CARBON FILM 33KOHM+-5% 1/8W
R329	0700058	CARBON FILM 22KOHM+-5% 1/8W
R330	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R3501	0101400	CARBON FILM 750HM+-5% 1/8W
R401	0700014	CARBON FILM 100HM+-5% 1/8W
R402	0700014	CARBON FILM 100HM+-5% 1/8W
R404	0700059	CARBON FILM 27KOHM+-5% 1/8W
R406	0700033	CARBON FILM 2700HM+-5% 1/8W
R407	0700057	CARBON FILM 18KOHM+-5% 1/8W
R408	0700063	CARBON FILM 47KOHM+-5% 1/8W
R409	0700081	CARBON FILM 1.0MOHM+-5% 1/8W
R410	0700056	CARBON FILM 15KOHM+-5% 1/8W
R412	0700053	CARBON FILM 8.2KOHM+-5% 1/8W
R414	0700072	CARBON FILM 220KOHM+-5% 1/8W
R415	0700052	CARBON FILM 6.8KOHM+-5% 1/8W
R416	0700034	CARBON FILM 3300HM+-5% 1/8W
R417	0700059	CARBON FILM 27KOHM+-5% 1/8W
R419	0700061	CARBON FILM 33KOHM+-5% 1/8W
R420	0700049	CARBON FILM 4.7KOHM+-5% 1/8W
R422	0700043	CARBON FILM 1.5KOHM+-5% 1/8W
R425	0700063	CARBON FILM 47KOHM+-5% 1/8W
R427	0700063	CARBON FILM 47KOHM+-5% 1/8W
R434	0700072	CARBON FILM 220KOHM+-5% 1/8W
R4501	0700067	CARBON FILM 100KOHM+-5% 1/8W
R4502	0700067	CARBON FILM 100KOHM+-5% 1/8W
R4503	0700038	CARBON FILM 6800HM+-5% 1/8W
R4504	0700038	CARBON FILM 6800HM+-5% 1/8W
R4505	0101400	CARBON FILM 750HM+-5% 1/8W
R4506	0101400	CARBON FILM 750HM+-5% 1/8W
R4507	0101400	CARBON FILM 750HM+-5% 1/8W
R4508	0700067	CARBON FILM 100KOHM+-5% 1/8W
R4509	0700067	CARBON FILM 100KOHM+-5% 1/8W
R4511	0700067	CARBON FILM 100KOHM+-5% 1/8W
R4512	0700067	CARBON FILM 100KOHM+-5% 1/8W
R4513	0700038	CARBON FILM 6800HM+-5% 1/8W
R4514	0700038	CARBON FILM 6800HM+-5% 1/8W
R501	0700059	CARBON FILM 27KOHM+-5% 1/8W
R502L	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R502R	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R503L	0700036	CARBON FILM 470 OHM+-5% 1/8W
R503R	0700036	CARBON FILM 470 OHM+-5% 1/8W
R504L	0700063	CARBON FILM 47KOHM+-5% 1/8W
R504R	0700063	CARBON FILM 47KOHM+-5% 1/8W
R505L	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R505R	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R506L	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R506R	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R507L	0700049	CARBON FILM 4.7KOHM+-5% 1/8W
R507R	0700049	CARBON FILM 4.7KOHM+-5% 1/8W
R508L	0700055	CARBON FILM 12KOHM+-5% 1/8W
R508R	0700055	CARBON FILM 12KOHM+-5% 1/8W
R509L	0700048	CARBON FILM 3.9KOHM+-5% 1/8W
R509R	0700048	CARBON FILM 3.9KOHM+-5% 1/8W
R511	0700058	CARBON FILM 22KOHM+-5% 1/8W
R513	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R514L	0101766	CHIP RESISTOR 12KOHM+-1% 1/8W
R514R	0101766	CHIP RESISTOR 12KOHM+-1% 1/8W
R515L	0700054	CARBON FILM 10KOHM+-5% 1/8W
R515R	0700047	CARBON FILM 3.3KOHM+-5% 1/8W
R516	0700075	CARBON FILM 390KOHM+-5% 1/8W
R518	0700081	CARBON FILM 1.0MOHM+-5% 1/8W
R519L	0700053	CARBON FILM 8.2KOHM+-5% 1/8W
R519R	0700053	CARBON FILM 8.2KOHM+-5% 1/8W
R520	0700067	CARBON FILM 100KOHM+-5% 1/8W
R521L	0700049	CARBON FILM 4.7KOHM+-5% 1/8W
R521R	0700049	CARBON FILM 4.7KOHM+-5% 1/8W
R522L	0700067	CARBON FILM 100KOHM+-5% 1/8W
R522R	0700067	CARBON FILM 100KOHM+-5% 1/8W
R523	0700071	CARBON FILM 180KOHM+-5% 1/8W
R524	0700074	CARBON FILM 330KOHM+-5% 1/8W
R528	0700054	CARBON FILM 10KOHM+-5% 1/8W
R529	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R530L	0700039	CARBON FILM 8200HM+-5% 1/8W
R530R	0700039	CARBON FILM 8200HM+-5% 1/8W
R531L	0700048	CARBON FILM 3.9KOHM+-5% 1/8W
R531R	0700048	CARBON FILM 3.9KOHM+-5% 1/8W
R532L	0700049	CARBON FILM 4.7KOHM+-5% 1/8W
R532R	0700049	CARBON FILM 4.7KOHM+-5% 1/8W
R533L	0700042	CARBON FILM 1.2KOHM+-5% 1/8W
R533R	0700042	CARBON FILM 1.2KOHM+-5% 1/8W
R537	0700048	CARBON FILM 3.9KOHM+-5% 1/8W
R538L	0700057	CARBON FILM 18KOHM+-5% 1/8W
R538R	0700057	CARBON FILM 18KOHM+-5% 1/8W
R539	0700049	CARBON FILM 4.7KOHM+-5% 1/8W
R540L	0700068	CARBON FILM 120KOHM+-5% 1/8W
R540R	0700068	CARBON FILM 120KOHM+-5% 1/8W
R541L	0700067	CARBON FILM 100KOHM+-5% 1/8W
R541R	0700067	CARBON FILM 100KOHM+-5% 1/8W
R542L	0700062	CARBON FILM 39KOHM+-5% 1/8W
R542R	0700062	CARBON FILM 39KOHM+-5% 1/8W
R543L	0700063	CARBON FILM 47KOHM+-5% 1/8W
R543R	0700063	CARBON FILM 47KOHM+-5% 1/8W
R544L	0700028	CARBON FILM 1200HM+-5% 1/8W
R544R	0700028	CARBON FILM 1200HM+-5% 1/8W
R545	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R547	0700058	CARBON FILM 22KOHM+-5% 1/8W
R553	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R555	0700027	CARBON FILM 100 OHM+-5% 1/8W

SYMBOL-NO	P-NO	DESCRIPTION
R601	0700062	CARBON FILM 39KOHM+-5% 1/8W
R603	0700081	CARBON FILM 1.0MOHM+-5% 1/8W
R604	0700073	CARBON FILM 270KOHM+-5% 1/8W
R605	0700061	CARBON FILM 33KOHM+-5% 1/8W
R606	0700061	CARBON FILM 33KOHM+-5% 1/8W
R607	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R609	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R610	0700081	CARBON FILM 1.0MOHM+-5% 1/8W
R611	0700062	CARBON FILM 39KOHM+-5% 1/8W
R612	0700068	CARBON FILM 120KOHM+-5% 1/8W
R613	0700065	CARBON FILM 68KOHM+-5% 1/8W
R614	0700057	CARBON FILM 18KOHM+-5% 1/8W
R615	0700065	CARBON FILM 68KOHM+-5% 1/8W
R616	0700081	CARBON FILM 1.0MOHM+-5% 1/8W
R617	0700067	CARBON FILM 100KOHM+-5% 1/8W
R618	0700038	CARBON FILM 680OHM+-5% 1/8W
R619	0700038	CARBON FILM 680OHM+-5% 1/8W
R620	0700072	CARBON FILM 220KOHM+-5% 1/8W
R621	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R622	0700063	CARBON FILM 47KOHM+-5% 1/8W
R623	0700081	CARBON FILM 1.0MOHM+-5% 1/8W
R624	0700049	CARBON FILM 4.7KOHM+-5% 1/8W
R625	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R627	0700049	CARBON FILM 4.7KOHM+-5% 1/8W
R628	0700062	CARBON FILM 39KOHM+-5% 1/8W
R629	0700036	CARBON FILM 470 OHM+-5% 1/8W
R630	0700055	CARBON FILM 12KOHM+-5% 1/8W
R631	0700046	CARBON FILM 2.7KOHM+-5% 1/8W
R632	0700081	CARBON FILM 1.0MOHM+-5% 1/8W
R638	0700081	CARBON FILM 1.0MOHM+-5% 1/8W
R642	0700048	CARBON FILM 3.9KOHM+-5% 1/8W
R651	0700063	CARBON FILM 47KOHM+-5% 1/8W
R652	0700063	CARBON FILM 47KOHM+-5% 1/8W
R653	0700079	CARBON FILM 820KOHM+-5% 1/8W
R654	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R655	0700038	CARBON FILM 680OHM+-5% 1/8W
R656	0700063	CARBON FILM 47KOHM+-5% 1/8W
R657	0700063	CARBON FILM 47KOHM+-5% 1/8W
R658	0700063	CARBON FILM 47KOHM+-5% 1/8W
R750	0700027	CARBON FILM 100 OHM+-5% 1/8W
R751	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R752	0700032	CARBON FILM 220 OHM+-5% 1/8W
R753	0700043	CARBON FILM 1.5KOHM+-5% 1/8W
R754	0700029	CARBON FILM 150 OHM+-5% 1/8W
R755	0700044	CARBON FILM 1.8KOHM+-5% 1/8W
R756	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R757	0700035	CARBON FILM 390OHM+-5% 1/8W
R758	0700047	CARBON FILM 3.3KOHM+-5% 1/8W
R768	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R769	0700039	CARBON FILM 820OHM+-5% 1/8W
R770	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R771	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R801	0700038	CARBON FILM 680OHM+-5% 1/8W
R806	0700038	CARBON FILM 680OHM+-5% 1/8W
R807	0700062	CARBON FILM 39KOHM+-5% 1/8W
R811	0700046	CARBON FILM 2.7KOHM+-5% 1/8W
R812	0700054	CARBON FILM 10KOHM+-5% 1/8W
R813	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R814	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R816	0700046	CARBON FILM 2.7KOHM+-5% 1/8W
R817	0700054	CARBON FILM 10KOHM+-5% 1/8W
R821L	0700067	CARBON FILM 100KOHM+-5% 1/8W
R821R	0700067	CARBON FILM 100KOHM+-5% 1/8W
R822L	0700067	CARBON FILM 100KOHM+-5% 1/8W
R822R	0700067	CARBON FILM 100KOHM+-5% 1/8W
R823L	0700067	CARBON FILM 100KOHM+-5% 1/8W
R823R	0700067	CARBON FILM 100KOHM+-5% 1/8W
R824L	0700067	CARBON FILM 100KOHM+-5% 1/8W
R824R	0700067	CARBON FILM 100KOHM+-5% 1/8W
R825L	0700047	CARBON FILM 3.3KOHM+-5% 1/8W
R825R	0700047	CARBON FILM 3.3KOHM+-5% 1/8W
R826L	0700053	CARBON FILM 8.2KOHM+-5% 1/8W
R826R	0700053	CARBON FILM 8.2KOHM+-5% 1/8W
R827L	0700051	CARBON FILM 5.6KOHM+-5% 1/8W
R827R	0700051	CARBON FILM 5.6KOHM+-5% 1/8W
R828L	0700052	CARBON FILM 6.8KOHM+-5% 1/8W
R828R	0700052	CARBON FILM 6.8KOHM+-5% 1/8W
R841	0700058	CARBON FILM 22KOHM+-5% 1/8W
R842	0700054	CARBON FILM 10KOHM+-5% 1/8W
R843	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R846	0700039	CARBON FILM 820OHM+-5% 1/8W
R847	0700054	CARBON FILM 10KOHM+-5% 1/8W
R848L	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R848R	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R901	0700018	CARBON FILM 22OHM+-5% 1/8W
R902	0700018	CARBON FILM 22OHM+-5% 1/8W
R903	0700054	CARBON FILM 10KOHM+-5% 1/8W
R904	0700049	CARBON FILM 4.7KOHM+-5% 1/8W
R905	0700049	CARBON FILM 4.7KOHM+-5% 1/8W
R906	0700049	CARBON FILM 4.7KOHM+-5% 1/8W
R907	0700049	CARBON FILM 4.7KOHM+-5% 1/8W
R908	0700054	CARBON FILM 10KOHM+-5% 1/8W
R909	0700054	CARBON FILM 10KOHM+-5% 1/8W
R910	0700054	CARBON FILM 10KOHM+-5% 1/8W
R911	0700054	CARBON FILM 10KOHM+-5% 1/8W
R912	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R913	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R914	0700067	CARBON FILM 100KOHM+-5% 1/8W
R915	0101765	RESISTOR 10KOHM+-1% 1/8W
R916	0700054	CARBON FILM 10KOHM+-5% 1/8W
R917	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R918	0700063	CARBON FILM 47KOHM+-5% 1/8W
R920	0700063	CARBON FILM 47KOHM+-5% 1/8W
R921	0700063	CARBON FILM 47KOHM+-5% 1/8W
R923	0700054	CARBON FILM 10KOHM+-5% 1/8W
R924	0700054	CARBON FILM 10KOHM+-5% 1/8W
R925	0700054	CARBON FILM 10KOHM+-5% 1/8W
R926	0700054	CARBON FILM 10KOHM+-5% 1/8W
R927	0700054	CARBON FILM 10KOHM+-5% 1/8W
R928	0700032	CARBON FILM 220 OHM+-5% 1/8W
R929	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R930	0700058	CARBON FILM 22KOHM+-5% 1/8W
R931	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R932	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R933	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R934	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R935	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R936	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R937	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R938	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R939	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R941	0700054	CARBON FILM 10KOHM+-5% 1/8W
R942	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R943	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R945	0101868	CARBON FILM 4.7MOHM+-5% 1/4W
R946	0700072	CARBON FILM 220KOHM+-5% 1/8W
R950	0700058	CARBON FILM 22KOHM+-5% 1/8W
R951	0700058	CARBON FILM 22KOHM+-5% 1/8W
R952	0700054	CARBON FILM 10KOHM+-5% 1/8W
R953	0700054	CARBON FILM 10KOHM+-5% 1/8W

SYMBOL-NO	P-NO	DESCRIPTION
R954	0700061	CARBON FILM 33KOHM+-5% 1/8W
R955	0700061	CARBON FILM 33KOHM+-5% 1/8W
R956	0700031	CARBON FILM 1800HM+-5% 1/8W
R957	0700033	CARBON FILM 2700HM+-5% 1/8W
R958	0700067	CARBON FILM 100KOHM+-5% 1/8W
R959	0700067	CARBON FILM 100KOHM+-5% 1/8W
R960	0700067	CARBON FILM 100KOHM+-5% 1/8W
R961	0700067	CARBON FILM 100KOHM+-5% 1/8W
R964	0700062	CARBON FILM 39KOHM+-5% 1/8W
R972	0700066	CARBON FILM 82KOHM+-5% 1/8W
R973	0700066	CARBON FILM 82KOHM+-5% 1/8W
R974	0700063	CARBON FILM 47KOHM+-5% 1/8W
R975	0700054	CARBON FILM 10KOHM+-5% 1/8W
R976	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
⚠RF901	0170471	FUSE RESISTOR 2.20HM+-5% 1/4W
RT301	5030084	TRIMMER 1KOHM
RT401	5006241	SEMI VARIABLE 100KOHM
RT501L	5035077	SEMI VARIABLE 10KOHM
RT501R	5035076	TRIMMER 4.7KOHM
RT601	5030012	SEMI VARIABLE 220KOHM
		SEMI-CONDUCTORS
D1411	5339131	DIODE 1SS254
D1501	5339131	DIODE 1SS254
D201	5339131	DIODE 1SS254
D202	5339131	DIODE 1SS254
D204	5339131	DIODE 1SS254
D2101	5380933	LED GL451
D3501	5339131	DIODE 1SS254
D3502	5339131	DIODE 1SS254
D404	5339131	DIODE 1SS254
D405	5339131	DIODE 1SS254
D406	5339131	DIODE 1SS254
D503	5339131	DIODE 1SS254
D504	5339131	DIODE 1SS254
D601	5339231	DIODE 1SR35-100A
D602	5339231	DIODE 1SR35-100A
D806	5339131	DIODE 1SS254
D811	5339131	DIODE 1SS254
D812	5339131	DIODE 1SS254
D842	5339551	DIODE SS1J4
D843	5339551	DIODE SS1J4
D906	5339131	DIODE 1SS254
D909	5339131	DIODE 1SS254
D910	5339131	DIODE 1SS254
D914	5339551	DIODE SS1J4
D915	5339131	DIODE 1SS254
D916	5339131	DIODE 1SS254
D917	5339131	DIODE 1SS254
D918	5339131	DIODE 1SS254
IC1401	1340782	IC M35010-013SP
IC1441	1361932	IC BA7046A
IC1502	1342031	IC NJM2248S
IC1801	1365802	IC CF70091A
IC1802	1343511	IC TDA1543
IC1803	5364761	IC BA4560
IC1804	1345961	IC BA3129D
IC1806	1388951	IC AFS816F
IC201	1374201	MODULE HT7278
IC202	1345831	IC MSM7403RS
IC2101	5327521	PHOTO TRANSISTOR SPI-315-C
IC2102	5327521	PHOTO TRANSISTOR SPI-315-C
IC401	5300641	IC BA7755
IC4501	1346641	IC MM1031XS

SYMBOL-NO	P-NO	DESCRIPTION
IC501	1365754	IC AN3961NFBPAA
IC502	5366911	IC BA6138
IC503	5350601	IC NJM4558D
IC601	1345872	IC HD49781ANT
IC651	5350601	IC NJM4558D
IC821L	5366981	IC M5201L
IC821R	5366981	IC M5201L
IC901	1366585	IC M38184M8-226FP
IC902	1345903	IC PST600G
IC903	1361213	IC X24C01AP
IC904	5300795	IC XRA6209U4
Q1411	5327063	TRANSISTOR 2SC1740S
Q1412	5327063	TRANSISTOR 2SC1740S
Q1451	5327063	TRANSISTOR 2SC1740S
Q1501	5327031	TRANSISTOR 2SA673(C)
Q1502	5327021	TRANSISTOR 2SA844CD
Q1503	5327075	TRANSISTOR XDC144ES
Q1505	5327062	TRANSISTOR 2SC1740S-R
Q1804	5327063	TRANSISTOR 2SC1740S
Q201	5327102	TRANSISTOR 2SC3533-BC
Q202	5327063	TRANSISTOR 2SC1740S
Q203	5327071	TRANSISTOR DTC124ES
Q204	5327063	TRANSISTOR 2SC1740S
Q205	5327063	TRANSISTOR 2SC1740S
Q206	1320004	TRANSISTOR 2SA854SQR
Q207	1320004	TRANSISTOR 2SA854SQR
Q208	5327071	TRANSISTOR DTC124ES
Q210	5327063	TRANSISTOR 2SC1740S
Q2101	5324661	PHOTO TRANSISTOR PT-483F1H
Q2102	5324661	PHOTO TRANSISTOR PT-483F1H
Q211	5327075	TRANSISTOR XDC144ES
Q212	5327075	TRANSISTOR XDC144ES
Q213	1320004	TRANSISTOR 2SA854SQR
Q214	5327075	TRANSISTOR XDC144ES
Q215	5327075	TRANSISTOR XDC144ES
Q216	5327075	TRANSISTOR XDC144ES
Q217	5327063	TRANSISTOR 2SC1740S
Q301	5327063	TRANSISTOR 2SC1740S
Q302	5327063	TRANSISTOR 2SC1740S
Q303	5327063	TRANSISTOR 2SC1740S
Q304	5327063	TRANSISTOR 2SC1740S
Q305	1320004	TRANSISTOR 2SA854SQR
Q306	5327063	TRANSISTOR 2SC1740S
Q307	5327063	TRANSISTOR 2SC1740S
Q309	1320004	TRANSISTOR 2SA854SQR
Q401	5327031	TRANSISTOR 2SA673(C)
Q402	5327102	TRANSISTOR 2SC3533-BC
Q403	5327075	TRANSISTOR XDC144ES
Q404	5327062	TRANSISTOR 2SC1740S-R
Q408	5327075	TRANSISTOR XDC144ES
Q502	5327021	TRANSISTOR 2SA844CD
Q503L	5327062	TRANSISTOR 2SC1740S-R
Q503R	5327062	TRANSISTOR 2SC1740S-R
Q505	5327062	TRANSISTOR 2SC1740S-R
Q506	5327075	TRANSISTOR XDC144ES
Q509	5327062	TRANSISTOR 2SC1740S-R
Q601	5327063	TRANSISTOR 2SC1740S
Q811	5327075	TRANSISTOR XDC144ES
Q812	5327031	TRANSISTOR 2SA673(C)
Q816	5327021	TRANSISTOR 2SA844CD
Q821	5327075	TRANSISTOR XDC144ES
Q841	5327075	TRANSISTOR XDC144ES
Q842	5327075	TRANSISTOR XDC144ES
Q843	5327021	TRANSISTOR 2SA844CD
Q846	5327075	TRANSISTOR XDC144ES

SYMBOL-NO	P-NO	DESCRIPTION
Q847	5327031	TRANSISTOR 2SA673(C)
Q901	5327075	TRANSISTOR XDC144ES
QR1801	5327075	TRANSISTOR XDC144ES
RM751	1388911	LIGHT DETECTING UNITGP1U581X
ZD1501	5339406	DIODE UTZJ30C
ZD901	5339572	DIODE UTZJ5.1A
ZD903	5339462	ZENER DIODE HZS12A1
		TRANSFORMER
T401	5261533	TRANSFORMER
		COILS
L1401	5121294	COIL 100UH
L1402	5121288	COIL 15UH
L1441	5121294	COIL 100UH
L1503	5159077	CHOKE COIL 100UH+-10%
L1504	5159077	CHOKE COIL 100UH+-10%
L1505	5159077	CHOKE COIL 100UH+-10%
L1506	5159077	CHOKE COIL 100UH+-10%
L1507	5121294	COIL 100UH
L1508	5159077	CHOKE COIL 100UH+-10%
L1801	5159153	CHOKE COIL 82UH
L1802	0770057	CHOKE COIL 100UH+-5%
L201	5159077	CHOKE COIL 100UH+-10%
L202	5159147	CHOKE COIL 33UH
L203	5159143	CHOKE COIL 15UH
L204	5159143	CHOKE COIL 15UH
L205	5159153	CHOKE COIL 82UH
L206	5159157	CHOKE COIL 180UH
L207	5159145	CHOKE COIL 22UH
L208	5159141	CHOKE COIL 10UH
L209	5159151	CHOKE COIL 56UH
L210	5159147	CHOKE COIL 33UH
L211	5159144	CHOKE COIL 18UH
L212	5159147	CHOKE COIL 33UH
L213	5159155	CHOKE COIL 120UH+-10%
L214	5159154	CHOKE COIL 100UH
L215	5159154	CHOKE COIL 100UH
L216	5159153	CHOKE COIL 82UH
L301	5159077	CHOKE COIL 100UH+-10%
L302	5159143	CHOKE COIL 15UH
L303	0770068	CHOKE COIL 680UH+-5%
L304	0770064	CHOKE COIL 330UH+-5%
L306	0770064	CHOKE COIL 330UH+-5%
L308	5159148	CHOKE COIL 39UH
L309	5159149	CHOKE COIL 47UH
L3501	5121294	COIL 100UH
L401	5159077	CHOKE COIL 100UH+-10%
L402	5159113	COIL,CHOKE 8.2MH
L403	5159077	CHOKE COIL 100UH+-10%
L502	0770057	CHOKE COIL 100UH+-5%
L503	0770057	CHOKE COIL 100UH+-5%
		CRYSTALS
X1401	5778462	CRYSTAL
X1801	5779141	CLYSTAL
X301	5778871	CRYSTAL
X901	5779111	CRYSTAL
X902	5783003	CRYSTAL
		MISCELLANEOUS

SYMBOL-NO	P-NO	DESCRIPTION
BL3501	5272378	LC FILTER
BL3502	5272378	LC FILTER
BL901	5272376	FILTER
CP1801	5165392	FILTER,TRAP
CP301	5786122	DELAY LINE
DG901	5315403	FLUORESCENT INDICATOR TUBE
J3501	5676663	JACK
J3502	5676665	JACK
J3503	5674611	JACK
J3504	5676666	JACK
J4501	5677512	JACK
J4502	5677511	JACK
S2101	5635631	SWITCH
S2102	5635331	SWITCH
S2104	5610891	SWITCH
S751	5634884	SWITCH
S752	5634884	SWITCH
S753	5634884	SWITCH
S755	5634884	SWITCH
S758	5634884	SWITCH
S759	5634884	SWITCH
S760	5634884	SWITCH
S761	5634884	SWITCH
S770	5634884	SWITCH
		PRE AMP/HEAD SW SECTION
		CAPACITORS
C0001	0800186	ELECTROLYTIC 47UF 16V
C0002	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C0003	0890016	CERAMIC DISC 39PF+-50% 50V
C0004	0800173	ELECTROLYTIC 0.33UF 50V
C0005	0890043	CERAMIC DISC 0.01UF+-20% 16V
C0006	0890033	CERAMIC DISC 680PF+-10% 50V
C0007	0890045	CERAMIC DISC 0.047UF+80-20% 50V
C0008	0890014	CERAMIC DISC 27PF+-50% 50V
C0009	0890043	CERAMIC DISC 0.01UF+-20% 16V
C0010	0890016	CERAMIC DISC 39PF+-50% 50V
C0011	0800185	ELECTROLYTIC 47UF 6.3V
C0012	0890029	CERAMIC DISC 390PF+-10% 50V
C0013	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C0014	0800185	ELECTROLYTIC 47UF 6.3V
C0015	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C0016	0800185	ELECTROLYTIC 47UF 6.3V
C0017	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C0018	0890015	CERAMIC DISC 33PF+-50% 50V
C0019	0890046	CERAMIC DISC 0.1UF+80-20% 50V
C0020	0890046	CERAMIC DISC 0.1UF+80-20% 50V
C0021	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C0022	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C0023	0890046	CERAMIC DISC 0.1UF+80-20% 50V
C0026	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C0027	0890043	CERAMIC DISC 0.01UF+-20% 16V
C0028	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C0029	0800185	ELECTROLYTIC 47UF 6.3V
C0030	0890013	CERAMIC DISC 22PF+-5% 50V
C0031	0800173	ELECTROLYTIC 0.33UF 50V
C0032	0890045	CERAMIC DISC 0.047UF+80-20% 50V
C0033	0890022	CERAMIC DISC 100PF+-10% 50V
C0034	0800175	ELECTROLYTIC 1.0UF 50V
C0035	0890043	CERAMIC DISC 0.01UF+-20% 16V
C0036	0890013	CERAMIC DISC 22PF+-5% 50V
C0037	0890013	CERAMIC DISC 22PF+-5% 50V
C0038	0890043	CERAMIC DISC 0.01UF+-20% 16V

SYMBOL-NO	P-NO	DESCRIPTION
C0039	0800175	ELECTROLYTIC 1.0UF 50V
C0040	0800173	ELECTROLYTIC 0.33UF 50V
C0041	0890043	CERAMIC DISC 0.01UF+-20% 16V
C0042	0890043	CERAMIC DISC 0.01UF+-20% 16V
C0043	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C0044	0800185	ELECTROLYTIC 47UF 6.3V
C0045	0890043	CERAMIC DISC 0.01UF+-20% 16V
C0046	0890043	CERAMIC DISC 0.01UF+-20% 16V
C0047	0890027	CERAMIC DISC 270PF+-10% 50V
C0048	0890018	CERAMIC DISC 56PF+-50% 50V
C0049	0890043	CERAMIC DISC 0.01UF+-20% 16V
C0050	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C0051	0890043	CERAMIC DISC 0.01UF+-20% 16V
C0052	0890046	CERAMIC DISC 0.1UF+80-20% 50V
C0053	0800173	ELECTROLYTIC 0.33UF 50V
C0059	0890046	CERAMIC DISC 0.1UF+80-20% 50V
C0060	0890014	CERAMIC DISC 27PF+-50% 50V
C0061	0890014	CERAMIC DISC 27PF+-50% 50V
C0070	0890019	CERAMIC DISC 68PF+-50% 50V
		RESISTORS
R0001	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R0002	0700037	CARBON FILM 560OHM+-5% 1/8W
R0003	0700032	CARBON FILM 220 OHM+-5% 1/8W
R0004	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R0005	0700038	CARBON FILM 680OHM+-5% 1/8W
R0006	0700027	CARBON FILM 100 OHM+-5% 1/8W
R0007	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R0008	0700027	CARBON FILM 100 OHM+-5% 1/8W
R0009	0700032	CARBON FILM 220 OHM+-5% 1/8W
R0010	0700027	CARBON FILM 100 OHM+-5% 1/8W
R0011	0700036	CARBON FILM 470 OHM+-5% 1/8W
R0012	0700022	CARBON FILM 390HM+-5% 1/8W
R0013	0700028	CARBON FILM 1200HM+-5% 1/8W
R0014	0700027	CARBON FILM 100 OHM+-5% 1/8W
R0015	0700027	CARBON FILM 100 OHM+-5% 1/8W
R0016	0700022	CARBON FILM 390HM+-5% 1/8W
R0017	0700028	CARBON FILM 1200HM+-5% 1/8W
R0019	0700027	CARBON FILM 100 OHM+-5% 1/8W
R0024	0700039	CARBON FILM 820OHM+-5% 1/8W
R0025	0700052	CARBON FILM 6.8KOHM+-5% 1/8W
R0026	0700061	CARBON FILM 33KOHM+-5% 1/8W
R0029	0700027	CARBON FILM 100 OHM+-5% 1/8W
R0032	0700014	CARBON FILM 100HM+-5% 1/8W
R0033	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R0034	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R0035	0700054	CARBON FILM 10KOHM+-5% 1/8W
R0036	0700054	CARBON FILM 10KOHM+-5% 1/8W
R0037	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R0038	0700047	CARBON FILM 3.3KOHM+-5% 1/8W
R0039	0700061	CARBON FILM 33KOHM+-5% 1/8W
R0040	0700058	CARBON FILM 22KOHM+-5% 1/8W
R0041	0700067	CARBON FILM 100KOHM+-5% 1/8W
R0042	0700048	CARBON FILM 3.9KOHM+-5% 1/8W
R0043	0700053	CARBON FILM 8.2KOHM+-5% 1/8W
R0044	0700054	CARBON FILM 10KOHM+-5% 1/8W
R0045	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R0046	0700054	CARBON FILM 10KOHM+-5% 1/8W
R0047	0700027	CARBON FILM 100 OHM+-5% 1/8W
R0048	0700043	CARBON FILM 1.5KOHM+-5% 1/8W
R0049	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R0050	0700063	CARBON FILM 47KOHM+-5% 1/8W
R0051	0700054	CARBON FILM 10KOHM+-5% 1/8W
R0052	0700061	CARBON FILM 33KOHM+-5% 1/8W
R0053	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R0062	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R0063	0700039	CARBON FILM 820OHM+-5% 1/8W
		SEMI-CONDUCTORS
IC0001	1362321	IC HA118162NT
IC0002	1361752	IC XRA7740S
IC0003	1361731	IC BA7047S
Q0001	5327063	TRANSISTOR 2SC1740S
Q0003	5327063	TRANSISTOR 2SC1740S
		COILS
L0001	5159077	CHOKE COIL 100UH+-10%
L0002	5159154	CHOKE COIL 100UH
L0003	5159146	CHOKE COIL 27UH
L0007	5159154	CHOKE COIL 100UH
L0010	5159148	CHOKE COIL 39UH
L0012	5159158	CHOKE COIL 220UH
L0015	5159147	CHOKE COIL 33UH
L0016	5159147	CHOKE COIL 33UH
		POWER SUPPLY SECTION
		CAPACITORS
C 1	0268741	POLYESTER FILM 0.1UF+-20% 250V
C 2	0268741	POLYESTER FILM 0.1UF+-20% 250V
⚠C 4	0268532	POLYESTER FILM 0.047UF+-10% 250V
⚠C 5	0235378	CERAMIC DISK 82PF+-5% 1KV
C 8	0880009	POLYESTER FILM 0.01UF+-10% 50V
C 9	0890083	CERAMIC DISC 470PF+-10% 50V
C10	0209774	CERAMIC DISC 0.033UF+-20% 50V
C11	0800193	ELECTROLYTIC 10UF 50V
C12	0207701	ELECTROLYTIC 470UF 16V
C13	0207701	ELECTROLYTIC 470UF 16V
C14	0268241	MYLAR 0.001UF+-10% 50V
C15	0800193	ELECTROLYTIC 10UF 50V
C16	0254322	ELECTROLYTIC 470UF 10V
C17	0254322	ELECTROLYTIC 470UF 10V
C19	0209641	CERAMIC DISC 10000PF+-10% 16V
C21	0890043	CERAMIC DISC 0.01UF+-20% 16V
C22	0204316	POLYESTER FILM 1000PF+-5% 50V
C23	0207653	ELECTROLYTIC 100UF 10V
C24	0890043	CERAMIC DISC 0.01UF+-20% 16V
C25	0890043	CERAMIC DISC 0.01UF+-20% 16V
⚠C27	0249678	CERAMIC DISC 220PF+-10%
⚠C28	0249678	CERAMIC DISC 220PF+-10%
⚠C29	0249678	CERAMIC DISC 220PF+-10%
⚠C30	0235991	CERAMIC CHIP 4700PF+-20% 250V
⚠C31	0235991	CERAMIC CHIP 4700PF+-20% 250V
⚠C32	0235991	CERAMIC CHIP 4700PF+-20% 250V
C33	0890043	CERAMIC DISC 0.01UF+-20% 16V
C34	0800385	ELECTROLYTIC 4.7UF+-20% 35V
C35	0800385	ELECTROLYTIC 4.7UF+-20% 35V
C36	0800205	ELECTROLYTIC 0.47UF 50V
C37	0800205	ELECTROLYTIC 0.47UF 50V
C38	0890043	CERAMIC DISC 0.01UF+-20% 16V
C39	0890087	CERAMIC 1000PF+-10% 50V
C40	0254322	ELECTROLYTIC 470UF 10V
C41	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C42	0890043	CERAMIC DISC 0.01UF+-20% 16V
C43	0880007	POLYESTER FILM 4700PF+-10% 50V
C44	0209774	CERAMIC DISC 0.033UF+-20% 50V

SYMBOL-NO	P-NO	DESCRIPTION
		RESISTORS
R 2	0101963	CARBON FILM 330KOHM+-5% 1/4W
R 3	0101958	CARBON FILM 120KOHM+-5% 1/8W
R 4	0101958	CARBON FILM 120KOHM+-5% 1/8W
R 5	0116057	METAL OXIDE 47KOHM+-5% 3W
R 6	0116064	METAL OXIDE FILM 270 OHM+-5% 1W
R 7	0101931	CARBON FILM 680OHM+-5% 1/4W
R 8	0700077	CARBON FILM 560KOHM+-5% 1/8W
R 9	0171287	METAL FILM 0.240HM+-5% 1W
R10	0700029	CARBON FILM 150 OHM+-5% 1/8W
R11	0700054	CARBON FILM 10KOHM+-5% 1/8W
R12	0700034	CARBON FILM 330OHM+-5% 1/8W
R13	0700024	CARBON FILM 56 OHM+-5% 1/8W
R14	0700049	CARBON FILM 4.7KOHM+-5% 1/8W
R15	0700038	CARBON FILM 680OHM+-5% 1/8W
R16	0101759	METAL FILM 2.2KOHM+-1% 1/8W
R17	0101762	CHIP RESISTOR 3.9KOHM+-1% 1/8W
R18	0101763	RESISTOR 4.7KOHM+-1% 1/8W
R20	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R21	0700067	CARBON FILM 100KOHM+-5% 1/8W
R22	0700027	CARBON FILM 100 OHM+-5% 1/8W
R23	0101945	CARBON FILM 10KOHM+-5% 1/4W
R24	0700027	CARBON FILM 100 OHM+-5% 1/8W
R25	0101945	CARBON FILM 10KOHM+-5% 1/8W
R26	0101947	CARBON FILM 15KOHM+-5% 1/4W
R27	0700063	CARBON FILM 47KOHM+-5% 1/4W
R28	0101949	CARBON FILM 22KOHM+-5% 1/4W
R29	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R30	0101801	CARBON FILM 2.2 OHM+-5% 1/4W
R31	0700046	CARBON FILM 2.7KOHM+-5% 1/8W
R32	0116057	METAL OXIDE 47KOHM+-5% 3W
R33	0700058	CARBON FILM 22KOHM+-5% 1/8W
R34	0700058	CARBON FILM 22KOHM+-5% 1/8W
R35	0700067	CARBON FILM 100KOHM+-5% 1/8W
R36	0101717	RESISTOR 68 OHM+-5% 1/6W
R37	0170641	METAL FILM 1MOHM+-5% 1/2W
R38	0101947	CARBON FILM 15KOHM+-5% 1/4W
		SEMI-CONDUCTOR
⚠D 1	5336552	DIODE S1WBA60
D 2	5336323	DIODE EG01C-P
D 3	5339131	DIODE 1SS254
D 4	5339131	DIODE 1SS254
D 8	5336402	DIODE RU4YX-SF
D 9	5336811	DIODE MA2180A
D10	5339591	DIODE D1NK40H
D11	5339431	DIODE 1SS244
D12	5333344	DIODE EK14-F7
D13	5339591	DIODE D1NK40H
D14	5339252	DIODE HZS5-C2
D15	5339484	DIODE HZS12B3T
D16	5339294	DIODE HZS11B1
D17	5339255	DIODE HZS12-C3T
IC 1	1322592	TRANSISTOR PC111L-B
IC 2	1360452	IC TL431CLP
Q 1	5327541	TRANSISTOR 2SK1198
Q 2	1320003	TRANSISTOR 2SA854(S)
Q 3	1321341	TRANSISTOR 2SD1765
Q 4	1321341	TRANSISTOR 2SD1765
Q 5	1321341	TRANSISTOR 2SD1765
Q 6	5327063	TRANSISTOR 2SC1740S
Q 7	5327202	TRANSISTOR 2SC1741SR
Q 8	1320003	TRANSISTOR 2SA854(S)
⚠QF 1	5721941	IC PROTECTOR
⚠QF 2	5721945	IC PROTECTOR, ICP-N38
⚠QF 4	5721945	IC PROTECTOR, ICP-N38
		TRANSFORMER
⚠T 1	5214562	POWER TRANSFORMER
		COILS
⚠L 1	5220242	COIL
⚠L 2	5220242	COIL
L 3	5272212	CORE
L 4	5152733	CHOKE COIL 10UH+-10%
L 5	5152733	CHOKE COIL 10UH+-10%
L 7	5272212	CORE
L 8	5272212	CORE
L 9	5272212	CORE
L10	5272212	CORE
		MISCELLANEOUS
⚠F 1	5723261	FUSE

Accessories supplied

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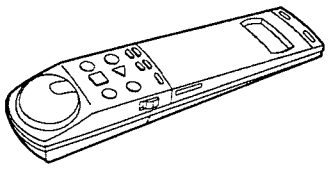
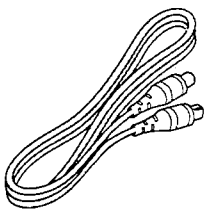


Remote Control Handset

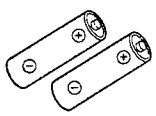
803



Aerial Cable for connecting this VTR and a TV

804

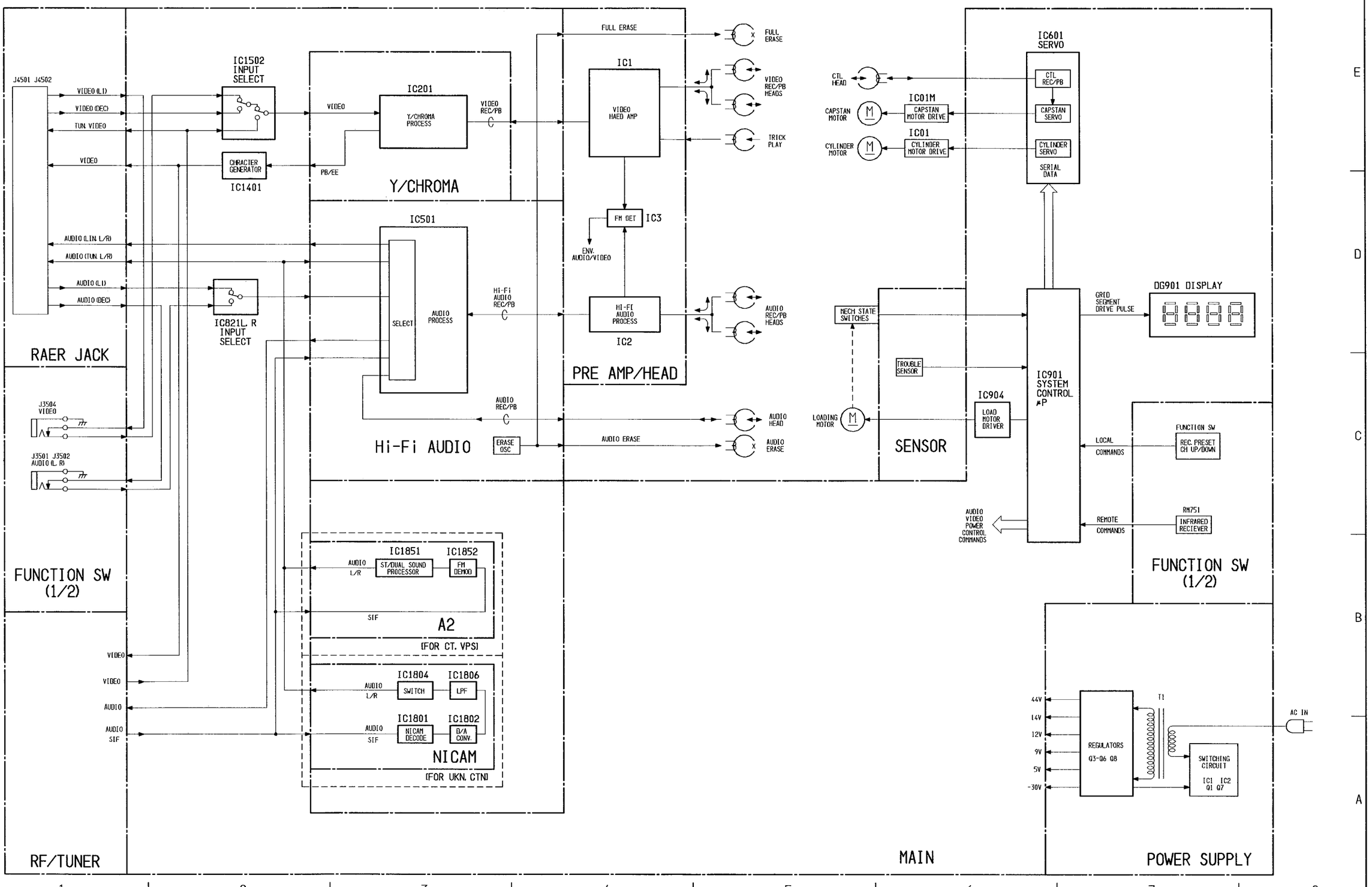
Dust preventive cover for VIDEO IN and AUDIO IN sockets on the front of the VTR



2 pcs.

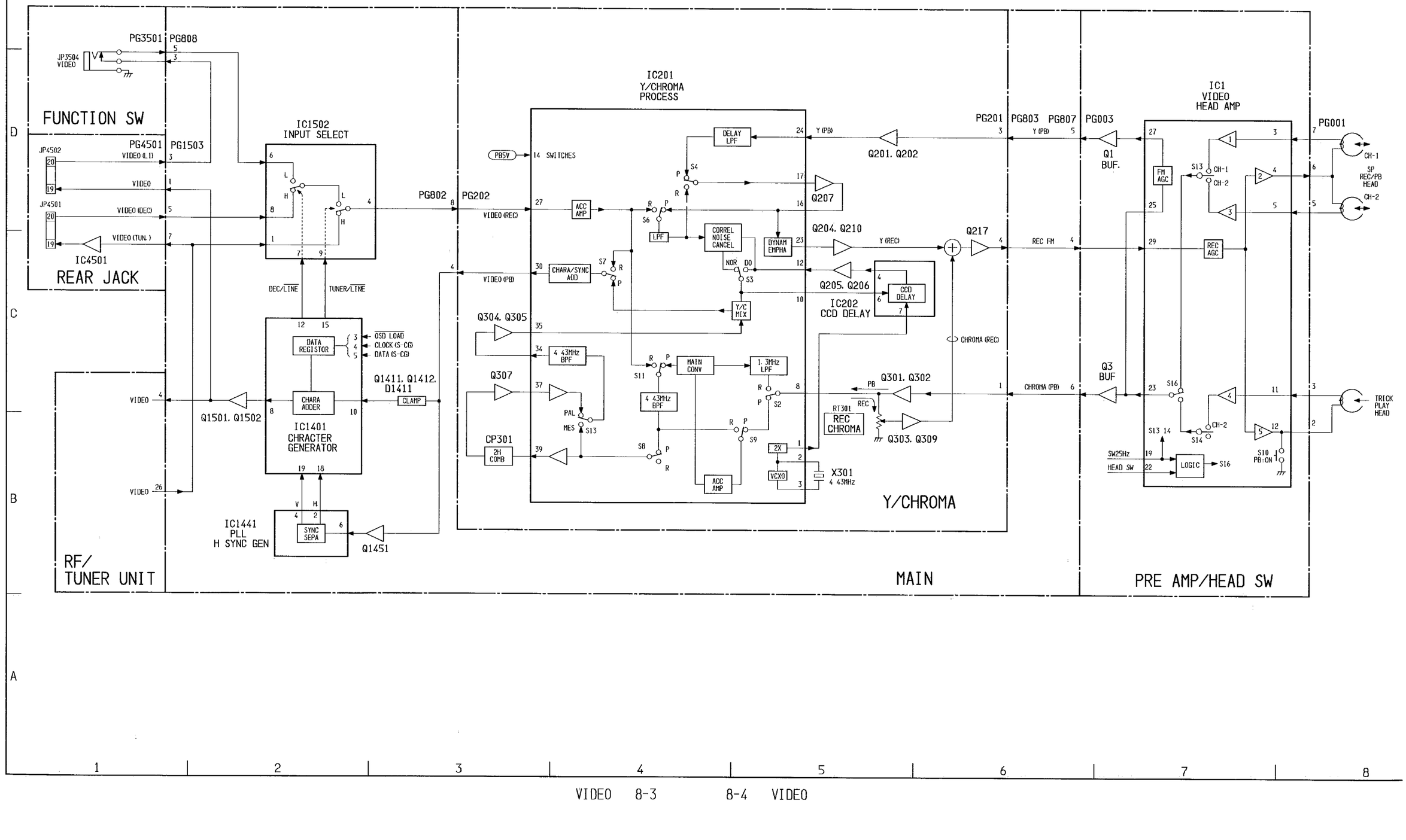
Batteries for remote control handset (R6)

APPENDIX
1. BLOCK DIAGRAM
OVERALL BLOCK DIAGRAM



OVERALL 8-1 8-2 OVERALL

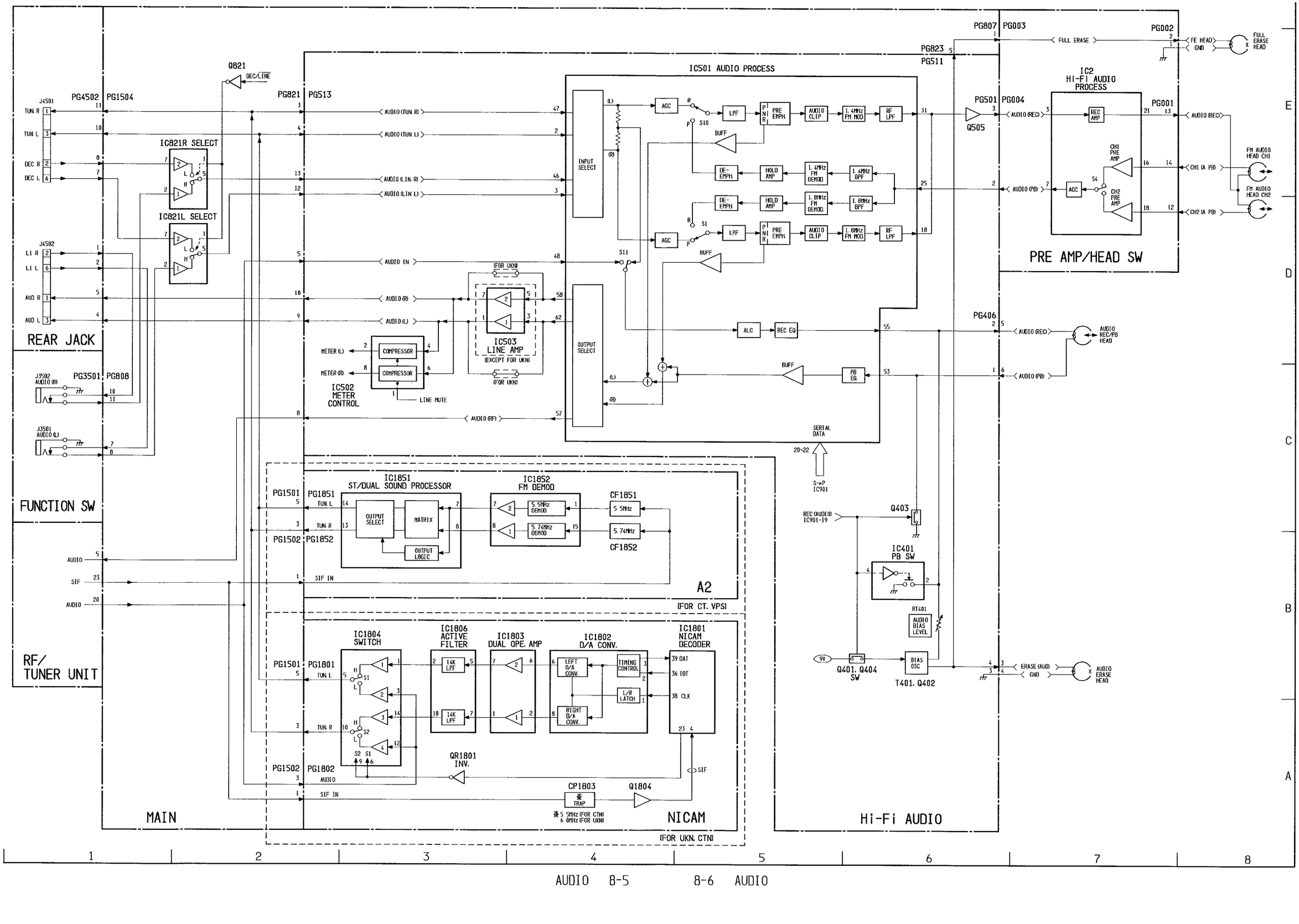
VIDEO BLOCK DIAGRAM



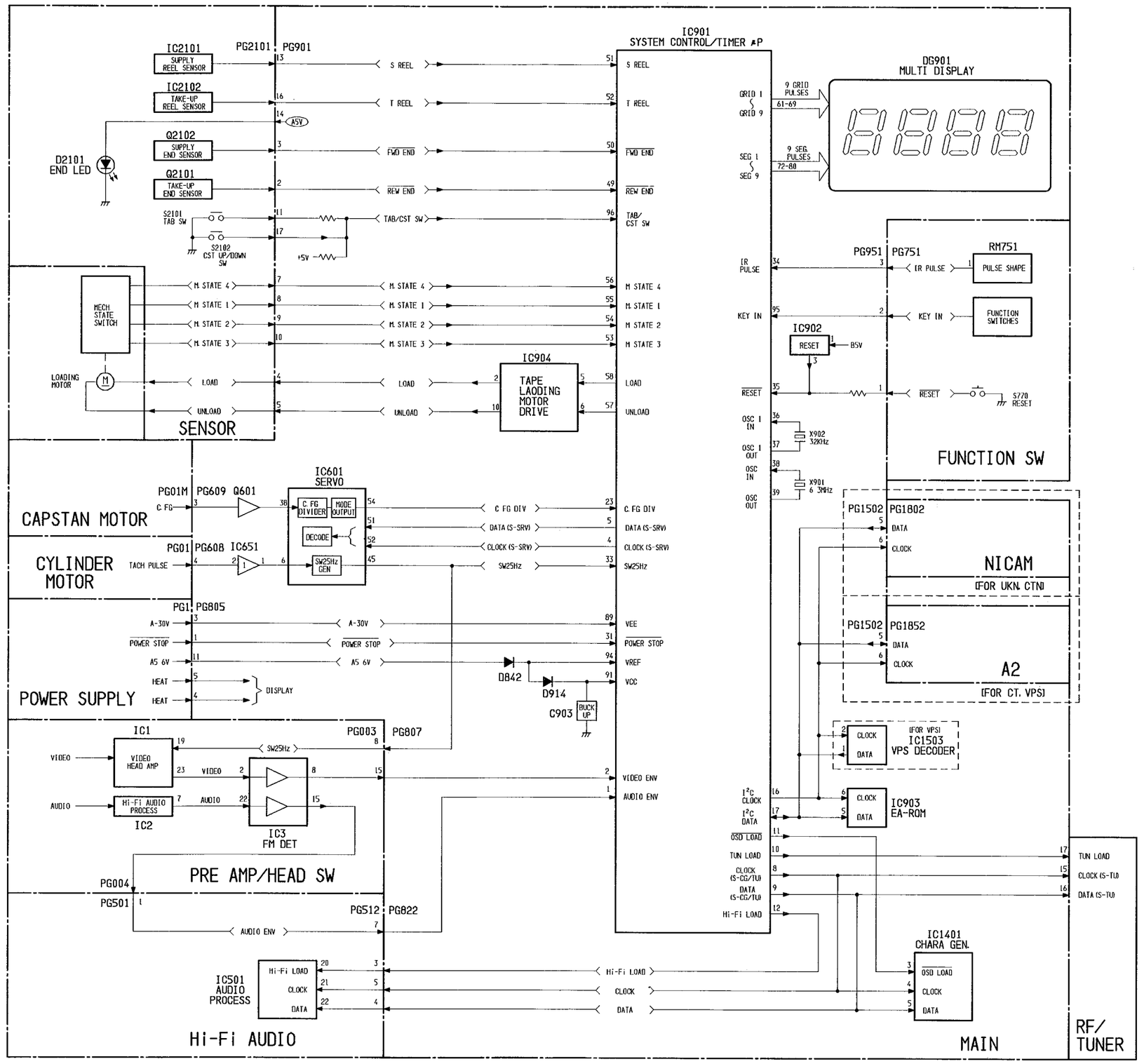
1 2 3 4 5 6 7 8

VIDEO 8-3 8-4 VIDEO

AUDIO BLOCK DIAGRAM

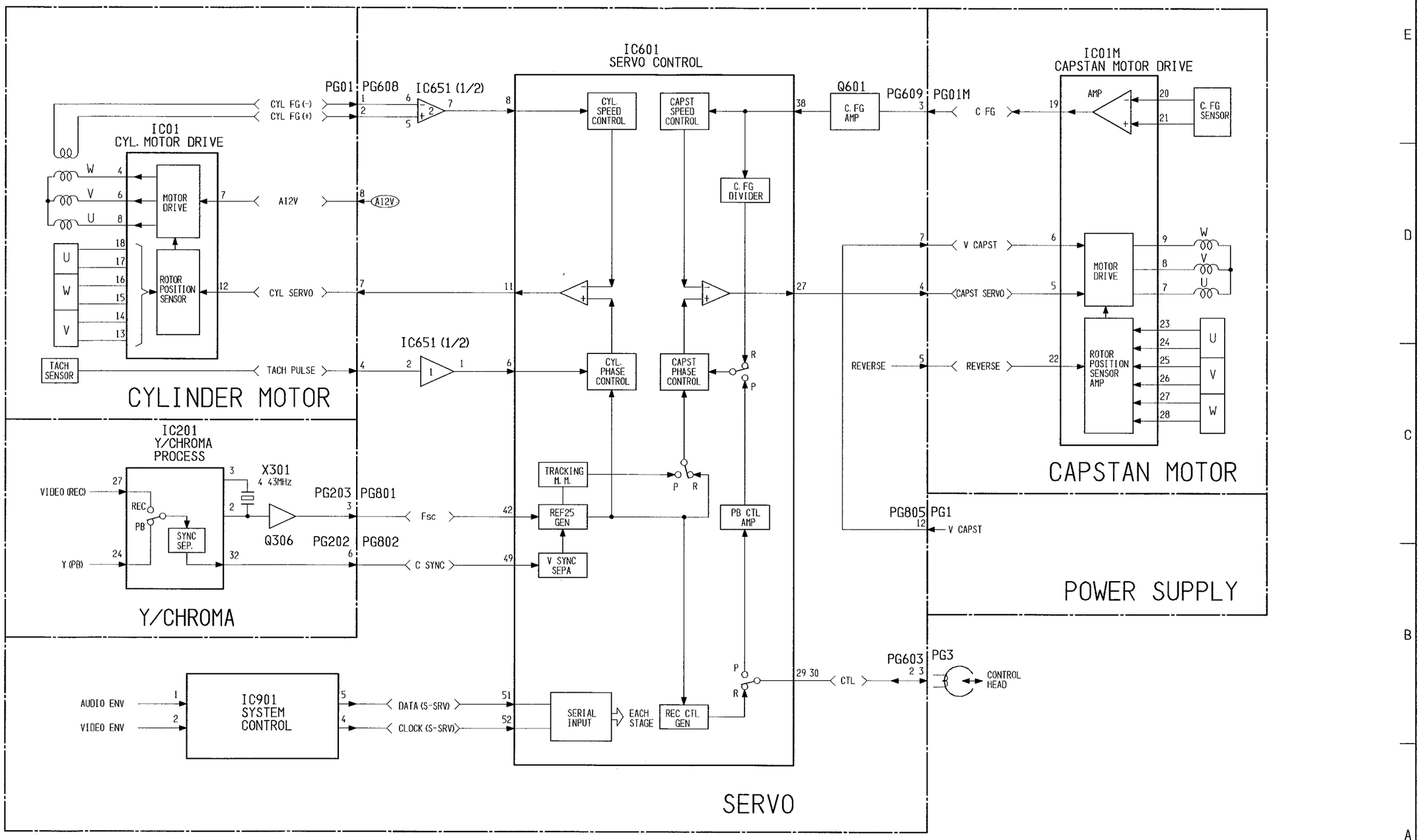


SYSTEM CONTROL/TIMER BLOCK DIAGRAM

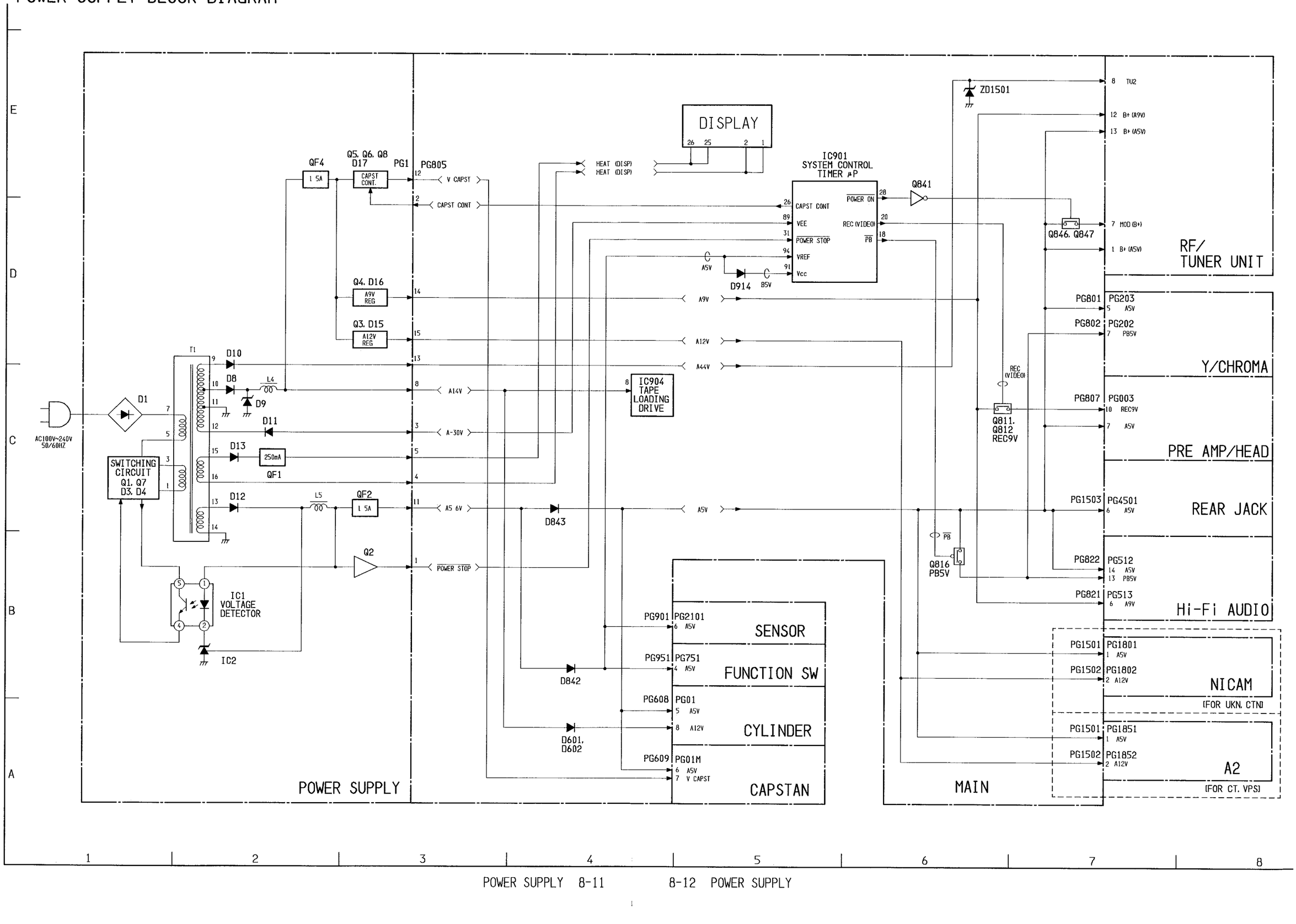


SYSTEM CONTROL/TIMER 8-7 8-8 SYSTEM CONTROL/TIMER

SERVO BLOCK DIAGRAM



POWER SUPPLY BLOCK DIAGRAM



2. MICROPROCESSOR PIN FUNCTION TABLE

Pin No.	I/O	Active Level	Abbreviation	Function
1 2	I I	DC DC	AUDIO ENV. VIDEO ENV.	Inputs a DC voltage representing the envelop of the playback video/audio FM signal and stores it in a register in the IC to serch the maximum envelope.
3	I	Lo	$\overline{\text{SYNC DET}}$	The μP judges that a TV station is tuned normally when logic "Lo" is input in the channel preset mode and can preset the station into the memory.
4	0	Pulse	CLOCK (S-SRV)	Outputs the clock pulse necessary to transfer data to the servo IC.
5	0	Pulse	DATA (S-SRV)	Outputs data to the servo IC. The data includes modes of operation (PB, REC, ASSEMBLE, CYL. ON) , tape speed, tracking data, etc.
6	I	Lo	$\overline{\text{CTL DUTY}}$	When "Lo" is input, the VCR performs playback for 10 seconds in the scana indexing mode. Counts the number of the "Lo" index pulses to search the designateg programme in the random access indexing mode.
7	0	H/L	NTSC/$\overline{\text{PAL}}$	Mode selection output H:NTSC L:PAL
8	0	Pulse	CLOCK(S-CG/TU)	Clock pulse to transfer data from the system control μP to the character generator and tuning interface IC.
9	0	Pulse	DATA(S-CG/TU)	Outputs OSD data to the character generator and tuning data to the tuning interface IC.
10	0	Hi	TUNER LOAD	Activates the data communication function between the system control μP and tuning interface IC.
11	0	Lo	$\overline{\text{OSD LOAD}}$	Activates the data communication function between the system control μP and character generator.
12	0	Lo	Hi-Fi LOAD	Activates the data communication function between the system control μP and character generator.
13	I	Hi	Hi-Fi INDI	During playback mode H: fix the audio output mode to Hi-Fi. L: Linear output.
14		—	NC	
15	0	Lo	$\overline{\text{PRESET}}$	Outputs "Lo" during tunimg preset mode to let the monitor TV display the tuned picture.
16	0	Pulse	CLOCK	Outputs a clock pulse necessary to communicate information between the system control μP and the EAROM and between the system control μP and the VPS decoder.
17	I/O	Pulse	DATA	Data input and output port. Data is communicated between the system control μP and the EAROM and between the system control μP and the VPS decorder.
18	0	Lo	$\overline{\text{PB}}$	Outputs "Lo" in the playback and audio dub modes to set the preamplifier P.C.B and Y/Chroma P.C.B to the playback mode.
19 20	0 0	Hi Hi	REC (AUDIO) REC (VIDEO)	Outputs "Hi" in the record mode to set the audio circuit to the recording mode. Outputs "Hi" in the record mode to set the video circuit to the recording mode.
21	0	H/L	VCR/$\overline{\text{TV}}$	When the VHF RF swith is set to "VCR" , the RF modulator's output is selected and appliedto the VHF output jack on the rear panel. Conversery when the VHF RF swith is set to "TV", the VHF antenna's output is selected.
22	0	H/L	NICAM/$\overline{\text{A2}}$	Tuner audio swithching contrtol signal H: NICAM L/ A2

Pin No.	I/O	Active Level	Abbreviation	Function
23	I	Pulse	C.FG DIV	Divided Capstan FG input. 1.Stops tape unloading when there is no input during unloading to prevent damage to the tape. 2.When pause is instructed and released in the recording mode, the timing of recording restart is determined by counting up and down the number of C.FG signals to minimize the overlapped section.
24 30	I I	Pulse Pulse	$\overline{CTL}$ CTL	Counted to display the real time counter. Used as the timing pulse to produce the brake pulse in the intermittent drive mode. Used to detect the tape speed of recorded tapes in the playback mode.
25		—		
26	0	Pulse	V.CAPST CONT	Outputs a PWM (pulse width modulation) signal to regulate the power supply voltage of the capstan motor. The output is regulated so that the V.capst becomes 10 V in the playback and recording modes, and 13V in the fast forward, rewind and stop modes.
27		—	NC	
28	0	Lo	$\overline{POWER\ ON}$	Outputs "Lo" to activate the 9V power supply circuit when the operate switch is pressed.
29		—	NC	
31	I	Lo	POWER STOP	Connected to the power stop detection circuit and sets the IC to the back-up mode when "Lo" is applied.
32	I	Pulse	TRACK.TRIG.	Used as the reference signal for tracking control.
33	I	Pulse	SW25Hz	Used to generate the ACCEL pulse in the slow mode. The period is monitored to judge whether or not the cylinder is rotating normally. If the period is too long, the μP commands unloading to prevent damage to the tape.
34	I	Pulse	IR PULSE	Receives the remote control signal.
35	I	Lo	$\overline{RESET}$	Initializes the μP.
36 37	I 0	AC AC	OSC1 IN OSC1 OUT	32KHz clock oscillator input/output.
38 39	I 0	AC AC	OSC2 IN OSC2 OUT	6MHz clock oscillator input/output pins.
40		Lo	Vss	GND
41		—	NC	
42		—	NC	
43	0	Hi	REVERSE	Outputs "Hi" to drive the capstan motor in the reverse direction.
44	0	Hi	CAPST.SERVO	Outputs a "Hi" pulse to drive the capstan motor and advance the tape by one frame in the intermittent drive mode. Outputs "Lo" to stop the capstan motor when the tape is driven intemittently.
45 46	0 0	H/L H/L	SWAY 2 SWAY 1	Outputs shake correction pulses to the cylinder servo circuit in the slow mode. The width and phase of two pulses are different from each other.
47	0	Hi	HEAD SW	Field head select output. Outputs "Hi" in the slow and frame advance modes to select the same heads as those used in normal playback.
48		—	NC	
49	I	Lo	$\overline{REW\ END}$	Take-up end sensor input. Stops rewind when "Lo" is input.
50	I	Lo	$\overline{FWD\ END}$	Supply end sensor input. Stops the tape when "Lo" is input.
51	I	Pulse	S.REEL	Supply reel pulse input. Used to calaulate the tape remaining time.

Pin No.	I/O	Active Level	Abbreviation	Function
52	I	Pulse	T.REEL	Take-up reel pulse input. Used to check whether or not the take-up reel disk is rotating. If the period is too long, commands unloading to prevent damage to the tape. The tape remaining time is calculated from the period of the take-up and supply reel pulses.
53 54 55 56	I I I I	H/L H/L H/L H/L	M.STATE 4 M.STATE 1 M.STATE 2 M.STATE 3	Mechanism state inputs. Detect the operation mode of the mechanism using the rotary mechanism state switch and specify the logic levels at LOAD and UNLOAD pins to control the tape loading motor.

Position	1 EJECT	2 UNLOAD STOP	3 FAST REW	4 LOAD STOP2	5 F.FWD /REW	6 PB/ REC	7 STILL /SLOW	8 REV. SLOW	9 REV.PB/ REV.SEARCH	10 TRAN. SITION
Pin 53	Lo	Lo	Hi	Lo	Lo	Lo	Lo	Lo	Hi	Lo
Pin 54	Lo	Hi	Lo	Hi	Lo	Lo	Hi	Hi	Hi	Lo
Pin 55	Hi	Hi	Lo	Lo	Lo	Hi	Hi	Lo	Lo	Lo
Pin 56	Lo	Lo	Lo	Hi	Hi	Hi	Hi	Lo	Lo	Lo

57 58	O O	H/L H/L	LOAD UNLOAD	Control the rotation of the tape loading motor via the loading motor driver.

	STOP	LOAD	UNLOAD	BRAKE
Pin 57	Lo	Hi	Lo	Hi
Pin 58	Lo	Lo	Hi	Hi

59	O	Hi	REC MUTE	Outputs a muting pulse which inhibits recording of video signal during loading and recording pause modes.
60	O	Hi	CURRENT UP	Outputs "Hi" to increase the recording current of the video signal for about 7s (PAL SP speed) after the assemble mode has been released or tape has been loaded in the recording mode.
61 62 63 64 65 66 67 68 69	O O O O O O O O O	Pulse Pulse Pulse Pulse Pulse Pulse Pulse Pulse Pulse	GRID 9 GRID 8 GRID 7 GRID 6 GRID 5 GRID 4 GRID 3 GRID 2 GRID 1	Output grid drive pulses.
70		—	NC	
71		—	NC	
72 73 74 75 76 77 78 79 80	O O O O O O O O O	Pulse Pulse Pulse Pulse Pulse Pulse Pulse Pulse Pulse	SEGMENT (i) SEGMENT (h) SEGMENT (g) SEGMENT (f) SEGMENT (e) SEGMENT (d) SEGMENT (c) SEGMENT (b) SEGMENT (a)	Output segment drive pulses and key scan pulses.
81		—	NC	
82		—	NC	
83		—	NC	

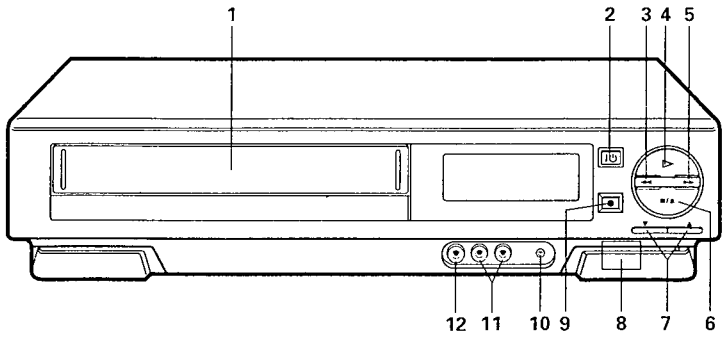
Pin No.	I/O	Active Level	Abbreviation	Function
84	O	Lo	EDIT OUT	Outputs "Lo" to set the record VCR to the recording pause mode. "Hi" is output after a programmed section has been played back in the auto assemble edit mode.
85	I	Hi	EDIT IN	When "Hi" is input in the recording mode, the μP sets the VCR to the recording pause mode.
86		—	NC	
87	I	Hi	TEST	Set the TEST mode (X value).
88	O	Hi	TRICK PLAY	Outputs "Hi" during trick play to switch the characteristics of the luminance and chrominance circuits and to mute the audio signal.
89	I	-30V	V.DISP	Negative power supply. Used to generate the grid and segment drive pulses.
90	I	Pulse	MODEL SWITCH	Detects the presence/absence of the diode connected between this pin and segment output pins to determine the functions of the VCR.

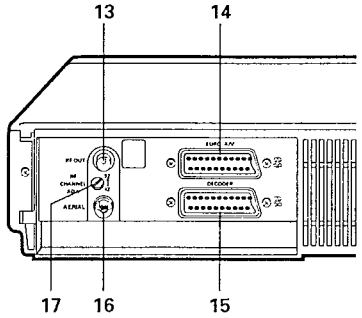
Scan pulse input/output pins		Function	
Input	Output	When connected via a diode.	When not connected via a diode.
90	80	Provides Hi-Fi and NICAM.	Without Hi-Fi and NICAM..
	78	Provides VPS.	Without VPS.
	76	Receives 1 broadcast band.	Receives 3 broadcast bands.
	73	Provides SP and LP speeds.	Without LP speed in models with 3 video heads.
	72	Provides DA4 Heads.	Provides 2/3 Heads.

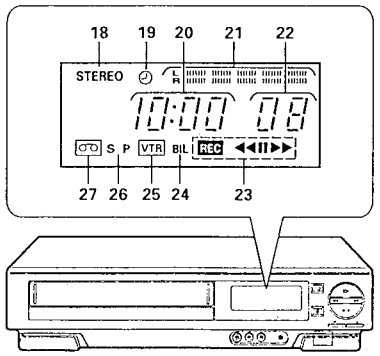
91	I	5V	Vcc	5V power supply.
92		—	NC	
93	I	Lo	GND	Ground.
94	I	5V	VREF	5V power supply.
95	I	A/D	KEY IN	Receives one of 11 voltages corresponding to the pressed key on the front pannel. When no key is pressed, this pin is kept at "Hi". When a key is pressed, the divider corresponding to the pressed key is active and a divided voltage is produced. Then the μP digitizes this divided voltage to detect the pressed key.
96	I	Hi Mid Lo	TAB/CST SW	1.Enables recording when the tab is intact and "Hi" is input. 2.Ejects the cassette automatically when its safety tab is not in place so "Mid" is input and recording is not set. 3.Detects the insertion (Lo), completion (Hi) and ejection (Hi) of a cassette, and turns on or off the capstan motor to perform cassette loading or unloading.
97	I	A/D	S CURVE	Detects the state of tuning in the tuning preset mode.
98	I	A/D	METER R	Audio Level Meter input for Rch.
99	I	A/D	METER L	Audio Level Meter input for Lch.
100		—	NC	

CUSTOMER CONTROLS

VTR Customer Controls

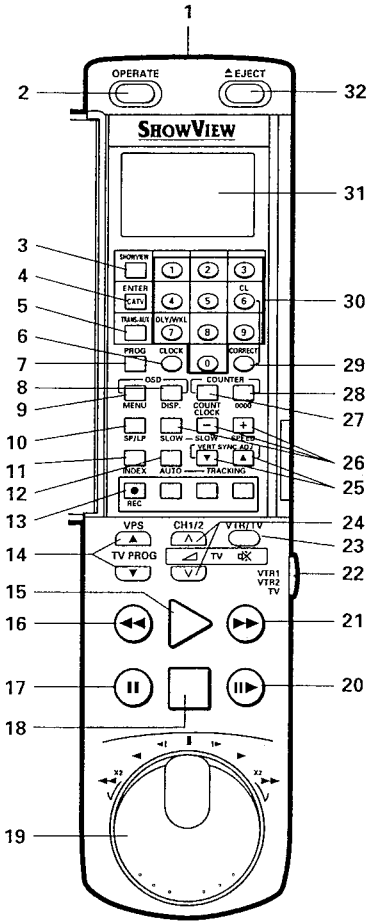






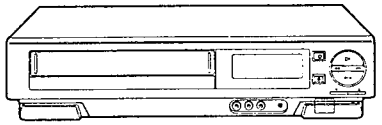
Item No.	Function	Page
1	Cassette compartment	15
2	Operate/Standby button	2
3	Rewind button	17
4	Play button	17
5	Fast forward button	17
6	Stop/Eject button	17
7	TV PROG — programme select	12
8	Remote control receiving window	10
9	REC/IRT	20
10	EDIT IN/OUT socket	42
11	AUDIO IN(L),(R) socket	40
12	VIDEO IN socket	40
13	RF OUT — signal out to TV	6
14	Scart socket	7
15	Decoder socket	44
16	AERIAL — signal input	6
17	RF CHANNEL ADJ — preset to CH37	11
	VTR Display	
18	STEREO indicator	21
19	Timer indicator	26
20	Time or Time counter	14
21	Audio level indicators	18
22	TV programme number or Auxiliary (L1)	12
23	VTR mode indicators	
	REC — record	19
	▶ — play-back	17
	◀◀ — appears during reverse play and rewind and flashes during reverse double-speed play and reverse visual search	17
	▶▶ — appears during fast forward and flashes during double-speed play and forward visual search	17
	❚❚ — record pause or play pause	17
	❚❚▶ — slow play or frame advance	17
24	BIL (bilingual) indicator	21
25	VTR, operate mode	—
26	Tape speed SP/LP	17
27	Tape-in indicator	15

Remote Control Handset Customer Controls



Item No.	Function	Page
1	Transmission window	10
2	OPERATE—switch between operate and standby mode	23
3	ShowView programming	24
4	ENTER/CATV— to preset CATV stations or enter ShowView number	24
5	TRANS/AUX— transmits data, select L1 input	25
6	CLOCK — enter or correct time on handset	14
7	PROG — to enter timer programme information	27
8	DISP — to recall on-screen display	37
9	MENU — to recall OSD menu	36
10	This button is not used	—
11	INDEX/GO-TO feature	34
12	AUTO tracking feature	18
13	REC — record button	20
14	Programme up/down button	12
15	Play button	17
16	Fast rewind or search	17
17	Pause/still button	17
18	Stops play/record function	17
19	Shuttle ring	19
20	Frame advance during still	17
21	Fast forward or search	17
22	VTR1/VTR2/TV mode switch	10
23	TV mute button VTR/TV select button	48
24	TV volume buttons CH1/2 button	48 18
25	TRACKING buttons or VERT SYNC controls	18
26	SLOW/SLOW SPEED +/–	17
27	COUNT/CLOCK — changes VTR display	32
28	0000 — clears time counter	32
29	CORRECT button	14
30	Number buttons	14
31	Display clock/timer programme information	14
32	EJECT — Eject cassette	15

PRE-TUNING OF BUILT-IN TV TUNER



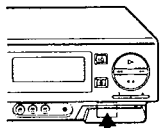
Video display after connecting the mains supply

Controls VTR's Display

1

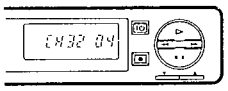
Turn on the TV and the VTR, then tune the TV to the video programme number as described on page 11
If you connect the VTR and TV using a 21-pin Scart connector lead, select the 21-pin Scart input of the TV

2



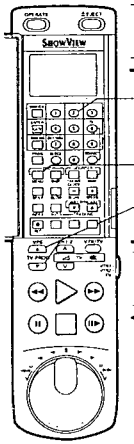
Press the MENU button
The menu, as illustrated, appears on the TV screen
(Display : VT-F350E(CTN) and VT-F351E(CTN))

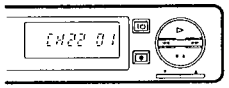
3



Press the button ②
The menu disappears from the TV screen and the VTR's display changes to the channel preset display such as on the left, for example

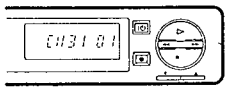
4





Press the TV PROG button to select the programme number (one of 01 through 49) to be memorized
We recommend you to set the programme number as follow, ready for "ShowView" timer programming
Note:
- See "ShowView" programming on page 24
- A programme number which has already been preset does not flash
- Programme numbers "01" through "49" can be now selected consecutively by pressing the TV PROG button (either up or down) In this case, you can use any number except for "25" through "29" Programme numbers "25" — "29" are used exclusively for "Pay Television" broadcasts

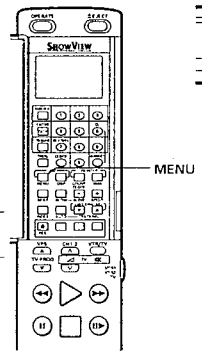
5

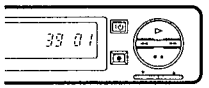


Press and release the button ⊙ **or** ⊙ to start searching for a broadcast TV station
⊙: Searches from low frequency to high frequency
⊙: Searches in the reverse order
At a station that is broadcasting, the picture appears on the TV screen If the programme displayed is different from that broadcast by the station to be preset, press the button ⊙ or ⊙ again
Note: Press the ⊙ button; stations are scanned in the order VHF(2 — 12)→UHF(21 — 69)→CATV(S1 — S41) →CATV(U1 — U5); the colon(:) appears when scanning CATV stations

Controls VTR's Display

6





Press button ⑪ to store it on this programme number when the picture from the station to be preset appears on the TV screen
"--" will be displayed and the sound will come on
Note: If the picture appears a little noisy you can fine tune the signal after storing by pressing the ⊙ or ⊙ to get the best picture After fine tuning for the best picture press ⑪ button to store again

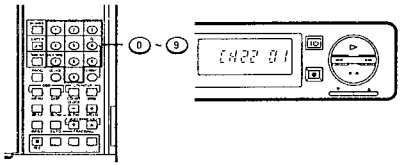
7

Repeat steps 4 through 6 for other stations

8

After having completed pre-tuning to all stations, **press the MENU button** The display will change from the channel indication to the clock time indication and the "menu" will appear on the TV screen
Press the MENU button again so the "menu" disappears from the TV screen

VHF(2-12), UHF(21-69) & CATV Stations Direct Preset

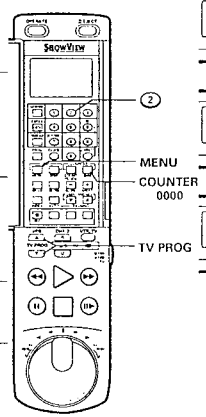


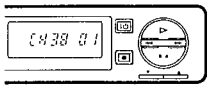
Press the 10 key buttons on the remote control handset instead of the procedure described in step 5 to preset desired VHF and UHF stations
To preset channel 22 in programme number 01, for example, press the TV PROG button to display the programme number "01" (in step 4) then press ② ② on the handset Then press ⑪ button to store again
Press the ENTER/CATV buton, then press ① ⑧ in this order to preset CATV channel 18

You can rearrange the desired stations by eliminating unwanted preset stations for programme up/down tuning

Eliminating Unwanted Preset Stations

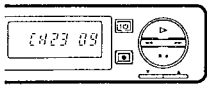
1





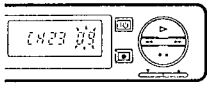
Press the MENU button, and then ②
The VTR display changes to the channel preset display such as on the left, for example

2



Press the TV PROG buttons until an unwanted station is found

3



Press the COUNTER 0000 button
The programme number flashes, indicating that the station has been erased from memory

4

Repeat steps 2 and 3 until all unwanted stations have been erased

5

After eliminating them, **press the MENU button** twice

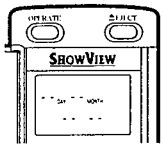
SETTING THE CLOCK

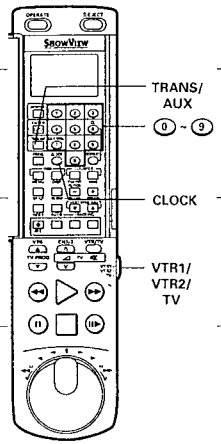
Things to know before starting

- While you are seting the clock, the display panel on the remote control handset will prompt you through the procedure
- Always press "0" **before** a single-digit hour, minute, day, month and year
- If you press the wrong digit during clock setting, press the CORRECT button repeatedly until the incorrect digit flashes then enter the correct digit
- You have about one minute to complete each step in the procedure If you do not proceed to the next step within this time, all entries are erased and you must start again
- The clock must be set to the correct time before programming the timer for unattended recording or Instant Recording Timer (IRT)

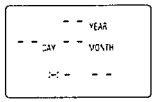
Controls | Remote Display

1 **Set the VTR 1/VTR 2/TV select switch to VTR 1**



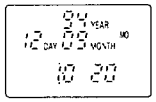


2 **Press the CLOCK button**



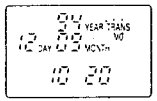
3 **Set the time and date.**

For example, press 1 0 2 0 for 10:20, and then 1 2 0 9 9 4 for the 12th of September, 1994 (0:00 for midnight, 12:00 for noon)
The day of week appears automatically

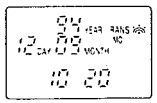


4 After setting the date, **Press the CLOCK button.**

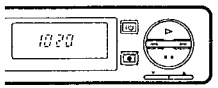
The clock starts counting and the blinking "TRANS" appears

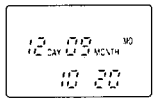


5 **Press the TRANS/AUX button** while aiming the remote control handset at the receiver on the VTR
The transferred time appears on the display of the VTR



6 **Press the CLOCK button**
The remote control handset and the VTR clock have now been set up

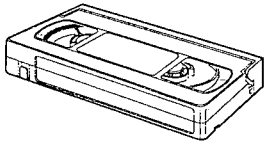




Notes:

- If you wish to correct the time in the VTR's display after transmitting the information to the VTR, follow the steps above correcting the information and transmit again
- If the power is interrupted, "– –:– –" will appear on the VTR display and the time and date will need to be reset

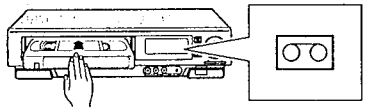
CASSETTE TAPES



Only use video cassettes with the VHS mark in this VTR

Insertion

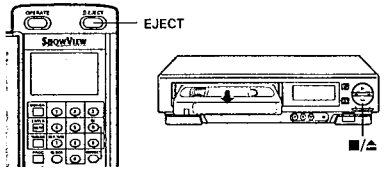
1



Push the cassette through the door until the VTR mechanism pulls it into the compartment
The operate automatically turns on and the indicator turns on when the cassette is in place

Removal

1



Press the EJECT button on the remote control handset or the button ■/≙ on the VTR
The cassette will come partially out of the compartment so you can pull it out

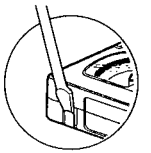
- The indicator turns off when the cassette is ejected
- Cassette can be ejected with the operate on or off

Remember that:

—The VTR automatically enters the play-back mode when a cassette without a safety tab is inserted
—The VTR automatically ejects the cassette if the REC or REC/IRT button is pressed when a cassette without a safety tab is in the VTR
—Be sure to check the safety tab before inserting a cassette for the above reasons

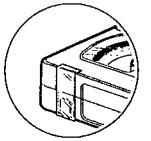
To avoid erasing a recording

Break off the safety tab using a screwdriver or similar tool



To re-record on a cassette which has its safety tab removed

Cover the hole with cellophane tape



ENGLISH

RECORDING TV PROGRAMMES

Your TV does not have to be turned on to make a recording because the VTR records TV programmes without the aid of your TV
It is only used for monitoring

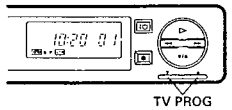
Controls VTR's Display

1

Insert a cassette

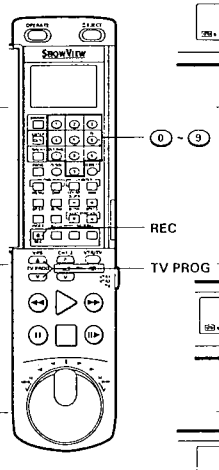
Note: Be sure to check that the safety tab is not missing If it is removed, the VTR is set to the play-back mode automatically

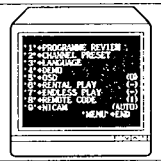
2



Select the programme to be recorded by pressing the TV PROG buttons or two number buttons

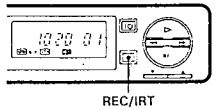
3





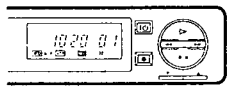
Set the NICAM display to AUTO (See page 38 for details) See the table on page 21
(for VT-F350E(CTN) and VT-F351E(CTN))

4



Press the REC or REC/IRT button
Now, recording starts

5



If you want to avoid recording unwanted material, **press the ⏸ button** Press the button again to continue recording
To prevent tape damage the VTR will automatically switch from record/pause to the stop mode after about 5 minutes

6

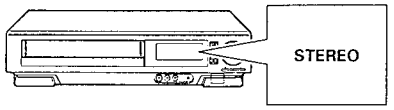
To view a programme while recording it
You can view a programme while recording it by selecting the video programme number (described on page 11) on your TV

7

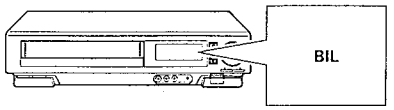
To record one programme while viewing another
You can record one programme while viewing another by selecting the programme you want to view on your TV The recorded programme can be viewed later at your convenience

8

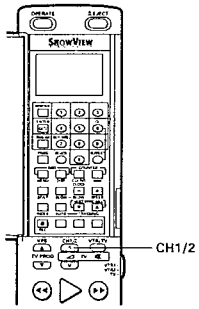
After the recording has been made **press the button □ or ■/⏏**



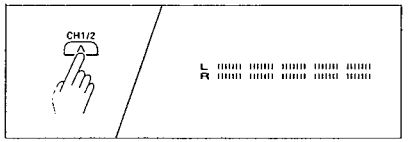
Recording stereo broadcast
The basic procedure for recording stereo broadcast is the same as it is for normal off-the-air recording
The STEREO indicator will appear in the VTR's display if the station is broadcasting in stereo



Recording bilingual broadcast
The basic procedure for recording a bilingual programme is the same as it is for normal off-the-air recording
The BIL (bilingual) indicator will appear in the VTR's display if the station is broadcasting a bilingual programme



Note: You can monitor the desired audio channel with the CH1/2 select button on the remote control unit Press the CH1/2 select button until you hear the desired audio channel The selected audio channel is displayed on the VTR During bilingual broadcasts L is the main language and R is the foreign language



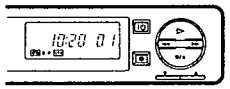
Audio to be recorded according to the type of broadcast (for VT-F350(CTN) and VT-F351E(CTN))

Type of broadcasting audio	NICAM [AUTO] or [—] display (see page 38)	Audio to be recorded		
		Mono audio track	Hi-Fi audio track	
			L	R
Standard	Either	Standard	Standard	Standard
Standard + NICAM mono	AUTO	Standard	NICAM mono	NICAM mono
	— (OFF)	Standard	Standard	Standard
Standard + NICAM stereo	AUTO	Standard	NICAM L	NICAM R
	— (OFF)	Standard	Standard	Standard
Standard + NICAM bilingual	AUTO	Standard	NICAM main	NICAM sub
	— (OFF)	Standard	Standard	Standard

INSTANT RECORDING TIMER (IRT)

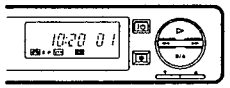
Controls VTR's Display

1



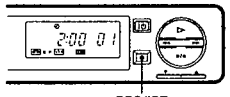
Ensure the time is correct in the VTR's display

2



Start recording as described on page 20.

3

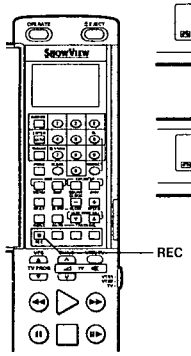


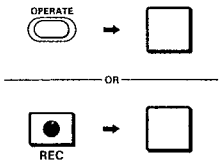
To start the IRT recording **press the REC or REC/IRT button again**

The recording time is then indicated in the display Press the REC or REC/IRT button until you select the required recording time, the time changes in hours and minutes in the following sequence; 0:30, 1:00, 1:30, 2:00, 3:00, 4:00

During recording the remaining time is displayed

At the end of the recording time, when the display shows 0:00, the VTR will automatically stop recording





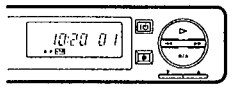
To stop recording during IRT;
either, press the OPERATE button and then stop button (□ or ■/≜) within 10 seconds;
or, press the REC or REC/IRT button until the VTR's display changes from recording time to the clock time and then press the stop button □ or ■/≜

TIMER RECORDING

Your TV does not have to be on to make a recording because the VTR records TV programmes without the aid of your TV It is only used for monitoring

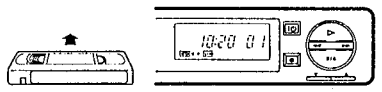
Controls VTR's Display

1



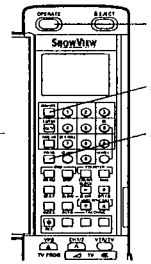
Make sure that the clock shows the present time correctly

2



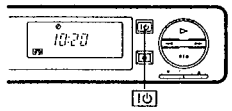
Insert a cassette
Be sure to check that the record safety tab is not missing If the safety tab is missing, recording will not begin

3



Programme the timer
See pages 24 to 30 for details

4



Turn the OPERATE button off

To interrupt a recording after it starts press the Operate button and then the Stop button within 10 seconds

If a cassette with its safety tab snapped off is inserted, it will be ejected automatically and the indicator ◴ in the VTR's display will start flashing when operate is turned off In this case, insert a cassette with its safety tab in place or cover the hole with cellophane tape

Also, if a cassette is not loaded in the VTR, the indicator ◴ starts flashing

ENGLISH

(TIMER RECORDING)

Programming the timer

This VTR incorporates two programming procedures for timer recording
One is conventional, and the TV programme No , start time, stop time, recording date, etc , must be input, and the other is called "ShowView" and up to 9 digits must be input

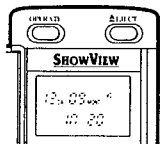
Programming the timer using "ShowView"

Things to know before starting programming

- To find the "ShowView" number, look in the TV section of most newspapers or TV guide magazines
- Check time and date are correct
- You have about one minute to complete each step of the procedure If you do not proceed to the next step within this time, all entries are erased and you must start again

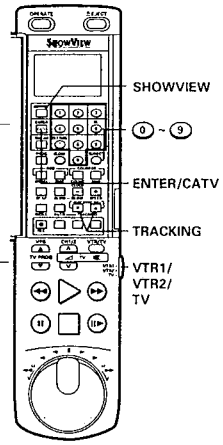
Controls | Remote Display

1



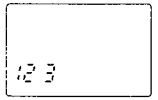
Set the VTR1/VTR2/TV select switch to VTR1

2



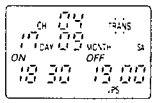
Press the SHOWVIEW button

3



Enter the "ShowView" number from the TV guide or newspaper etc for the programme you want to record, by using the number buttons

4



After entering the "showView" number, **press the ENTER/CATV button**

The programmed details appear

If you wish to change the programme allocations, see the additional operations section for ShowView setup on page 39

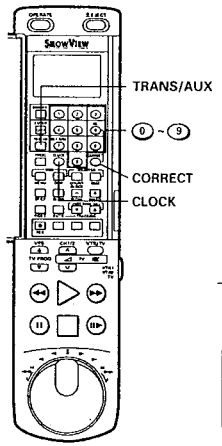
If you wish to change the end (OFF) time, press the TRACKING button ▲ or ▼ The end (OFF) time can be changed by up to 60 minutes in 10 minutes intervals

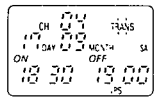
Notes:

- Use of "ShowView" numbers "ShowView" numbers only record programmes at the times shown in the TV guide
  The VTR timer will not follow the TV programme if the time is changed for any reason (e g delayed due to a previous programme)
- When you press the ENTER/CATV button, "VPS" will appear Ignore these letters because they are not concerned with the VTR operation
  If it is confusing, press the TV PROG(▲) button

Controls | Remote Display

5

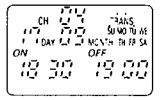




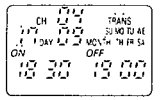
Select the type of programme you want to record

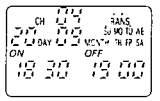
If you are programming the timer for one time recording, skip this step

To record at the same time every day of week



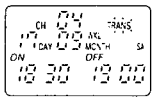
Press the 7 (DLY/WKL) button once to display all days



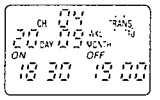


If you want to change the first recording date, press the CORRECT button repeatedly until the first digit of day starts flashing (If the flashing cursor passes the first digit of day, press the CORRECT button repeatedly again until the flashing cursor reaches the first digit of day) Then select the first recording date using the number buttons

To record on a specified day at the same time each week

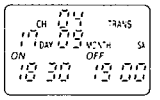


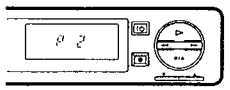
1 Press the 7 (DLY/WKL) button twice
The "WKL" appears



2 Press the 7 (DLY/WKL) button repeatedly until the desired day of the week you want to record appears

6





Press the TRANS/AUX button to transfer the programmed details to the VTR

The operate may be on or off when transferring the programmed details

The VTR shows the timer programme number for a few seconds

If the TV is turned on and tuned to the video channel, the programmed details appear on the TV screen for a few seconds

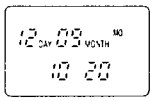
7

Press the CLOCK button to switch the display panel back to the clock/calendar display

(TIMER RECORDING)

Controls | Remote Display

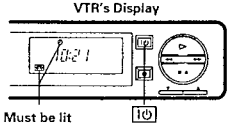
8



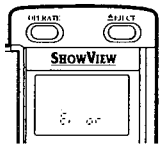
If you want to programme other event, repeat steps 1 to 7

9

VTR's Display



To activate the VTR's timer and make a recording at the preselected time, be sure to **turn the Operate button off**
Of course a cassette which has an intact safety tab must be inserted



Operating notes:

- If you have entered a wrong number in step 3, "Error" will appear on the remote display when the ENTER/CATV button is pressed In this case, enter the correct number again
- If the TRANS/AUX button is pressed when all the programme numbers that the VTR can store are occupied, a "FULL" indication will appear in the display on the VTR and the information transferred will be rejected
- See page 30 for recalling and clearing the programming from the VTR memory and for programme priority

Programming the timer without using "ShowView"

Things to know before starting programming

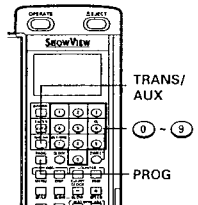
- While you are programming the timer, the display panel on the handset will prompt you through the procedure
- Always press "0" before a single-digit channel, hour and minute etc
- You have about one minute to complete each step of the procedure If you do not proceed to the next step within this time, all entries are erased and you must start again
- You can correct an error in the programme any time before the last step by pressing the CORRECT button repeatedly until the digit to be corrected flashes and then enter the correct digit
- Check time and date are correct

Controls | Remote Display

1

Set the VTR 1/VTR 2/TV select switch to VTR 1

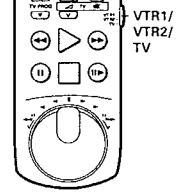
2

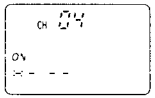


Press the PROG button

Note: When you press the PROG button, "VPS" will appear Ignore these letters because they are not concerned with the VTR operation If it is coufusing, press the TV PROG (▲) button

3



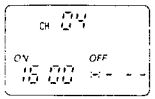


Select the TV programme number to be recorded
Fçexample, press 04 for TV station 4

To record video and audio signals from external equipment via the Scart socket on the back of the VTR, or VIDEO IN/AUDIO IN sockets on the front of the VTR, press the TRANS/AUX button so that "L1" is displayed in the display panel in place of a programme number
When you press the TRANS/AUX button, "L1" or "L2" will appear
Ignore "L2" because it is not concerned with recording in this model

Note: If selecting decoder input, select 25 to 29 (see page 44)

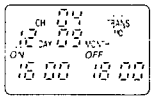
4



Select the start time
For example, press 1600 for 16:00 (4:00 p m)

0:00 for midnight 12:00 for noon

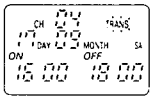
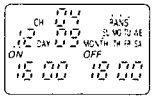
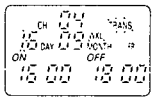
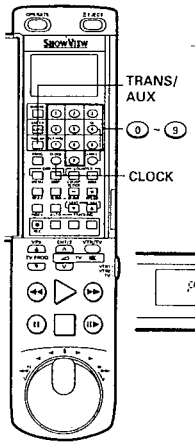
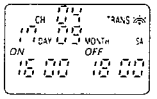
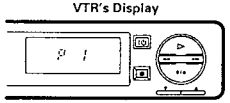
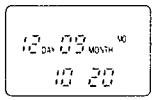
5

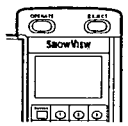
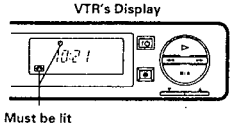


Select the stop time
For example, press 1800 for 18:00 (6:00 p m)

ENGLISH

(TIMER RECORDING)

Controls	Remote Display	
6		**Select the date for recording** **To record on a single day up to one year ahead** For example, press 1709 to begin recording on the 17th of September
		**To record at the same time every day of the week** Select the first recording date using the number buttons **Then press "7" (DLY/WKL) button once** to display all days
		**To record on a specified day at the same time each week** **Press the "7" (DLY/WKL) button** repeatedly until the desired day of the week you want to record appears
7  TRANS/AUX, 0 ~ 9, CLOCK		Now, programming has been completed to record one event **Press the TRANS/AUX button** while aiming the handset at the receiver on the VTR
		The operate may be on or off when transferring the programmed details
	VTR's Display 	The VTR shows the timer programme number for a few seconds
		If the TV is turned on and tuned to the video programme number, the programmed details appear on the TV screen for a few seconds
8		**Press the CLOCK button** to switch the display panel on the handset back to the clock/calendar display

Controls	Remote Display	
9		If you want to programme other programmes, repeat steps 2 to 8
10 	VTR's Display  Must be lit	To activate the VTR's timer and make a recording at the preselected time, be sure to turn the Operate button off Of course a cassette which has an intact safety tab must be inserted

Operating notes:

- If your timer programme has a TV programme channel number that you have not preset in the VTR, "Err" is displayed on the VTR display when you try to transfer this programme to the VTR In this case, correct the channel then transfer the data to the VTR again
- If the TRANS/AUX button is pressed when all the programme numbers that the VTR can store are occupied, a "FULL" indication will appear in the display on the VTR and the information transferred will be rejected

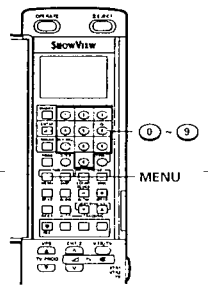
MENU FEATURES

Controls TV Screen

1

Turn on the operate switches of the VTR and the TV, then set the TV to the video programme number

2



Point the remote control handset at the receiver on the front of the VTR

Press the MENU button

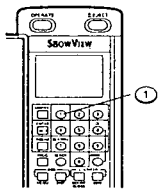
The menu, as illustrated, will appear on the TV screen

(Display VT-F350E(CTN) and VT-F351(CTN))

3

(for VT-F350(CTN) and VT-F351E(CTN))
Press one of "1" to "9" to select the required display
(only for VT-F350E(CT))
Press one of "1" to "8" to select the display

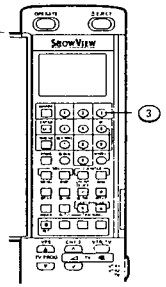
Checking (reviewing) the programme information



Press "1"
The TV screen will display the information you entered for the lowest programme number for 10 seconds

- Press "1" again if you want to view the next programme information
- Pressing "0" will clear the programme
- Press the MENU button to return to the original picture

Language selection



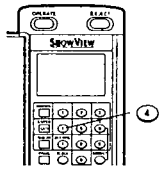
1 PRESS "3"

(for VT-F350E(CTN) and VT-F351E(CTN))
2 Press one of buttons "1" to "6"
"1" for English
"2" for German
"3" for French
"4" for Spanish
"5" for Swedish
"6" for Finnish

(only for VT-F350E(CT))
2 Press one of buttons "1" to "5"
"1" for English
"2" for French
"3" for Italian
"4" for Spanish
"5" for Dutch

Now, you can view the On-screen Display in the language you have selected

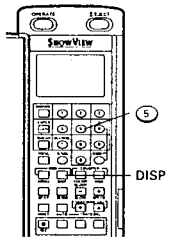
DEMO (OSD demonstration)



Press "4"
The picture demonstrating the OSD effects are each displayed for about 10 seconds.

Press the MENU button to end the OSD demonstration

OSD [O] or [—]



Press "5" to change the On-Screen Display setting

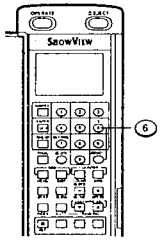
[O]: Whenever you change the mode, the new mode is automatically displayed on the TV screen for a few seconds

Notes:

- If the DISP button is pressed with this setting, the on-screen display will appear for a few seconds
- When the DISP button is pressed again before the display disappears, the display will disappear from the TV screen

[—]: The OSD will be switched off and nothing will be displayed on the TV screen even when the DISP button is pressed When this is selected, no operation mode will be displayed on the TV screen even when the VTR is operated This mode is useful to prevent recording of the On-Screen Display during copying a tape

RENTAL PLAY [O] or [—]



Press "6" to change the Rental Play setting

[O]: The VTR will automatically start play-back when a cassette with its safety tab removed is inserted into the VTR
Then the VTR will enter the rewind mode when the tape reaches its end or when the VTR plays a non-recorded section for approximately 30 seconds After rewinding the tape to its beginning, the VTR will eject the cassette and turn the operate off

[—]: The rental play feature is switched off (However, the VTR will automatically start play when a cassette with its safety tab removed is inserted into the VTR)

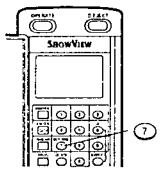
It is impossible to set both the RENTAL PLAY and ENDLESS PLAY functions to [O] at the same time If you attempt to do so, the other function is automatically set to [—]

When a cassette with its safety tab is loaded, rental play does not operate even if this function is set to [O]

ENGLISH

(MENU FEATURES)

ENDLESS PLAY [O] or [—]

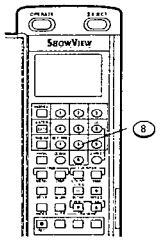


Press "7" to change the Endless Play setting

[O]: You can play the tape from the beginning to the end repeatedly While in the endless play mode, you can perform still play, frame advance, visual search, etc , however, this does not mean the endless play feature is switched off To switch off the endless play feature, you must select [—] with this display

[—]: The endless play feature is switched off

REMOTE CODE [1] or [2]



Press "8" to change the Remote Code setting

This display lets you control your VTR with the "1" or "2" position of the VTR 1/VTR 2/TV switch on the remote control handset

This is convenient when you want to add another Hitachi VTR to your system, and control both VTRs with the same handset

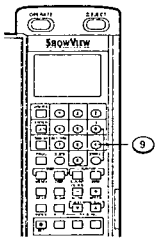
The "VTR 1" position of the VTR 1/VTR 2/TV switch on the handset will control the VTR to which [1] was assigned with this display, and the "VTR 2" position will control the VTR to which [2] was assigned with this display

[1]: Your VTR will respond to the "VTR 1" position on the handset

[2]: Your VTR will respond to the "VTR 2" position on the handset

The VTR will only respond to the remote code setting [1] or [2] you have selected If you select [2], you must set the VTR 1/VTR 2/TV switch on the handset to the "VTR 2" position before the VTR will respond to the handset

NICAM [AUTO] or [—] (for VT-F350E(CTN) and VT-F351E(CTN))



Press "9" to change the NICAM setting

[AUTO]: Usually select [AUTO] The VTR discriminates whether the broadcast is NICAM or not automatically

[—]: Select [—] when you do not want to receive NICAM broadcasts

SHOWVIEW SETUP

Changing the TV Programme Allocations

When you enter the "ShowView" number, the programmed details will appear on the remote display

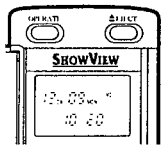
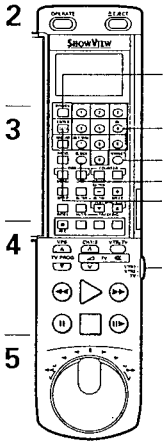
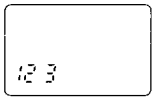
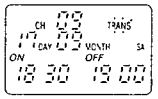
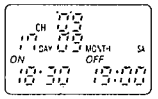
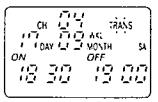
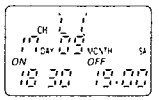
If the staion number differs from the station number you want to record, change by the procedure shown below

For timer recording using ShowView please refer to page 24

Things to know before changing the programme allocations

- You have about one minute to complete each step of the procedure If you do not proceed to the next step within this time, all entries are erased and you must start again
- Check time and date are correct

If you wish to change the programme allocations, follow the procedure below

	Controls	Remote Display	
1			**Set the VTR 1/VTR 2/TV select switch to VTR 1**
2	 SHOWVIEW		**Press the SHOWVIEW button**
3	⓪~⑨ CORRECT CLOCK ENTER/ CATV		**Enter the "ShowView" number** from the TV guide or newspaper etc for programme you want to record, by using the number buttons
4	VTR 1/ VTR 2/ TV		After entering the code number, **press the ENTER/CATV button** The programmed details appear
5			If you change the TV programme allocation, **press the CORRECT button once** The first digit of the TV programme number starts flashing Then enter the correct TV programme number
6			**Press the ENTER/CATV button** Now the programme number has been memorized **Press the CLOCK button** to switch the display panel on the remote control handset back to the clock/calendar display
			

Notes:

- If you change the TV programme allocations by following the above steps, the TV programme number will be automatically written with the alternated programme number when you programme hereafter
- If you want to record from an external video equipment connected to the Scart socket or VIDEO IN/AUDIO IN sockets, press the TRANS/AUX button to change the TV programme number to "L1"
- If selecting decoder input, select 25 to 29 (See page 44)

HITACHI

VT-F350E Series TK No. 4403E,G TOKAI Consumer Electronics Division

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HITACHI

SERVICE MANUAL
Wartungsanleitung

SUPPLEMENT

Ergänzung

TK | No.4403E,G-1

VT-F350E(UKN)
VT-F350E(CT)
VT-F355E(VPS)

CONTENTS

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CHAPTER 7

REPLACEMENT PARTS LIST

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VHS

This video deck is a VHS type video recorder. For proper operation, only the VHS type cassette must be used.

VHS

Dieser Video-Recorder entspricht dem VHS-Format. Für richtigen Betrieb müssen daher VHS-Magnetband-Cassetten verwendet werden.

Manuals related to the VT-F350E/F355E

Name of manual	Manual No.	Language
VT-F250E Series	4314E,G	English
Chapters Included		
Chapter 2	Pages E2-1 to E2-14	
Chapter 3	Pages E3-1 to E3-7 Pages E3-9 to E3-14	
VT-F350E Series	4403E,G-1	English

Anleitungen, die VT-F350E/F355E

Name der Anleitung	Anleitung-Nr.	Sprache
VT-F250E Serie	4314E,G	Deutsch
Enthaltene Kapitel		
Kapitel 2	Seiten G2-1 bis G2-14	
Kapitel 3	Seiten G3-1 bis G3-7 Seiten G3-9 bis G3-14	
VT-F350E Series	4403E,G-1	Deutsch

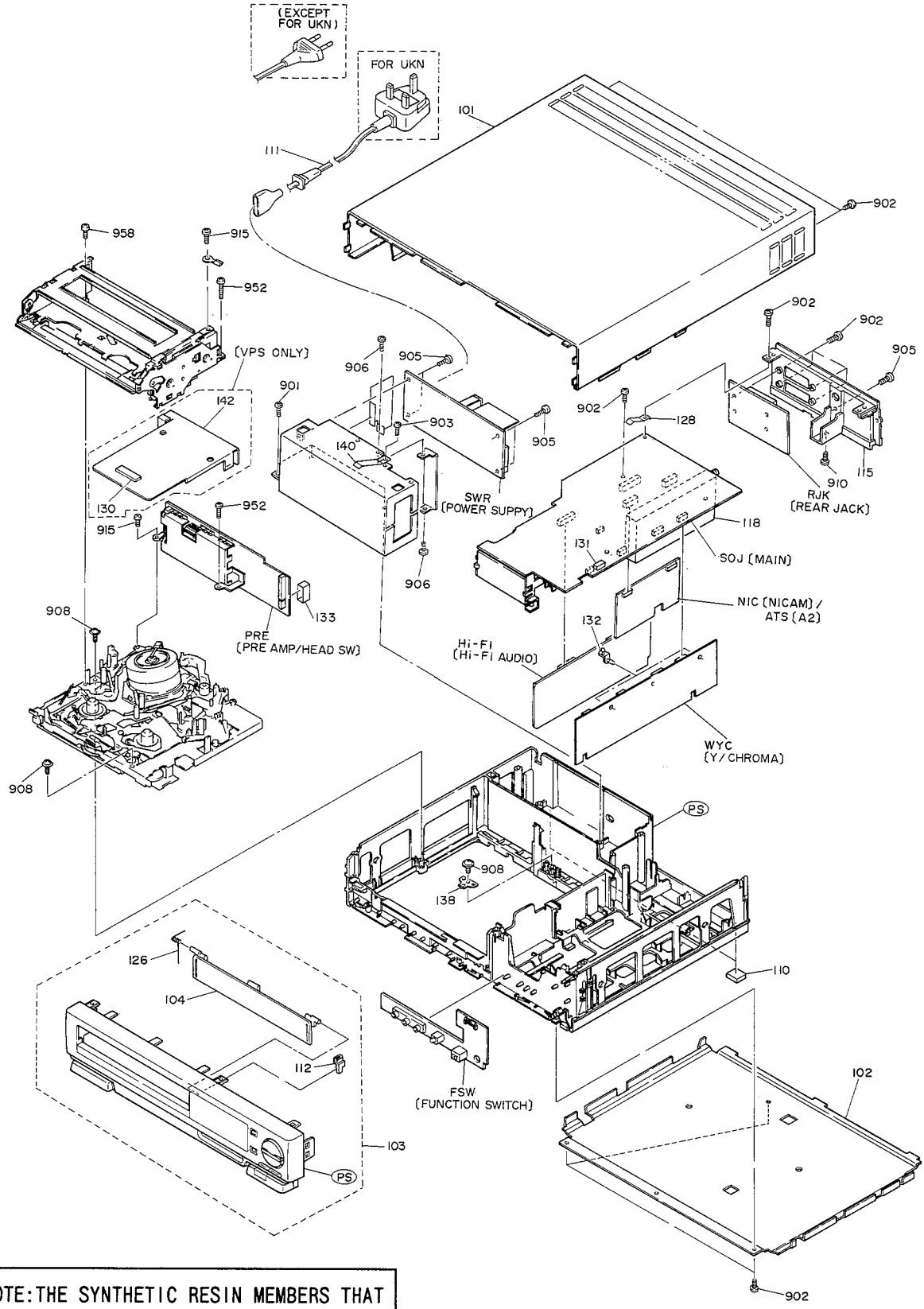
SPECIFICATIONS AND PARTS ARE SUBJECT TO CHANGE FOR IMPROVEMENT

Änderungen der Technischen Daten und Teile im Sinne ständiger Verbesserung vorbehalten.

VIDEO CASSETTE RECORDER
Video-Cassettenrecorder

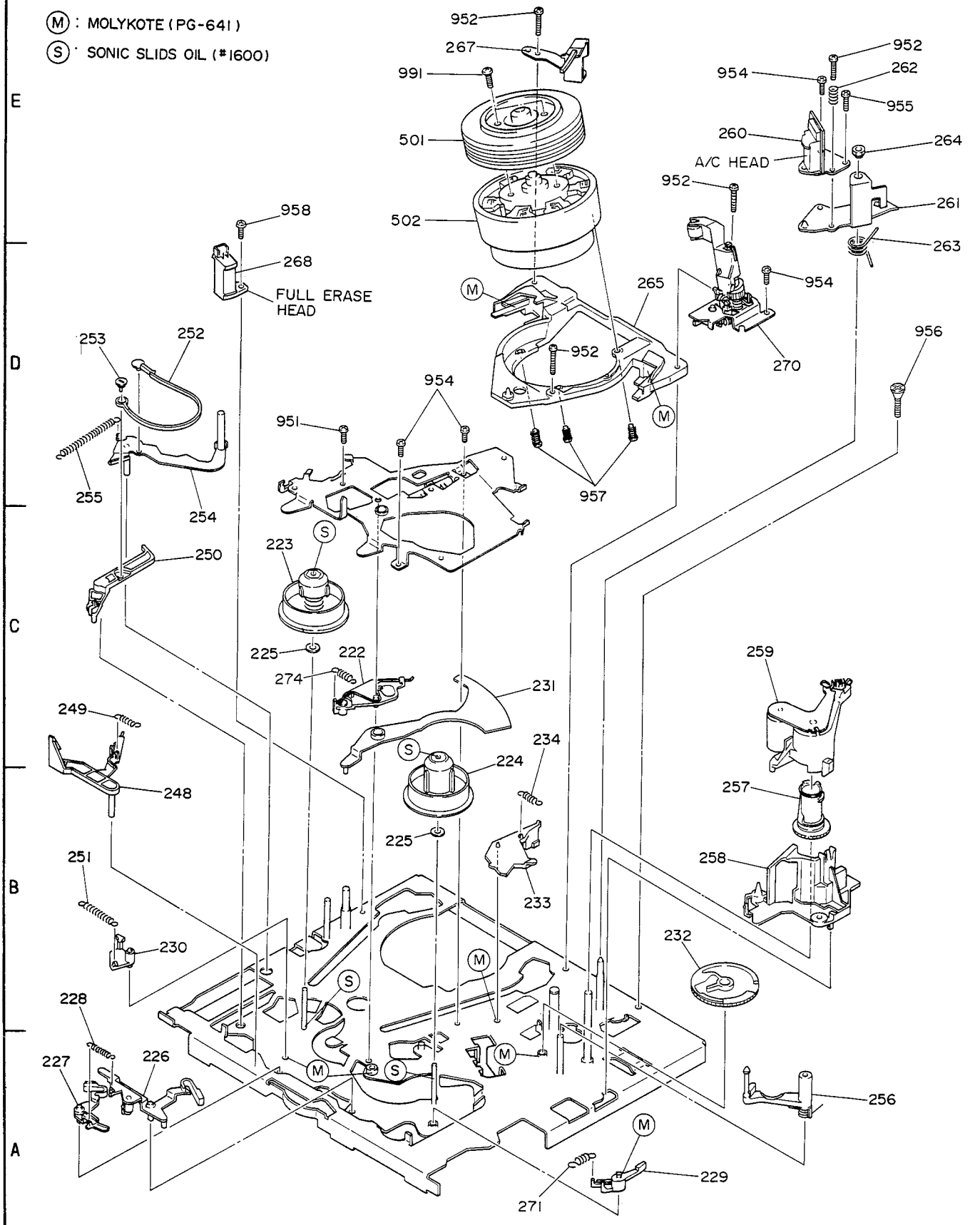
June 1995 Video & Personal Media Systems Division, Tokai Operation

EXPLODED VIEWS
1. CABINET SECTION

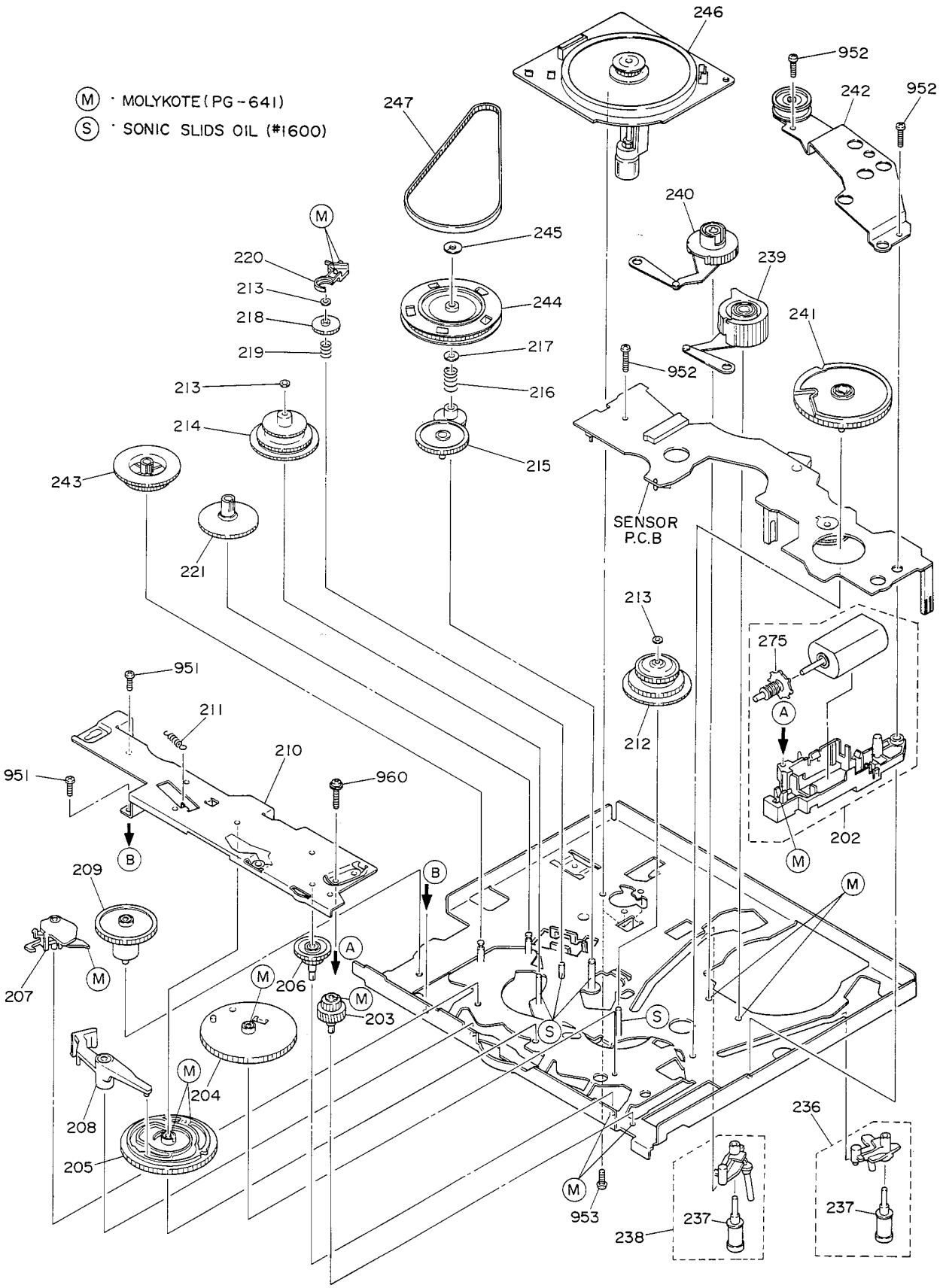


NOTE: THE SYNTHETIC RESIN MEMBERS THAT CAN BE DISMANTLED ARE SHOWN BY ABBREVIATIONS USING LETTERS.

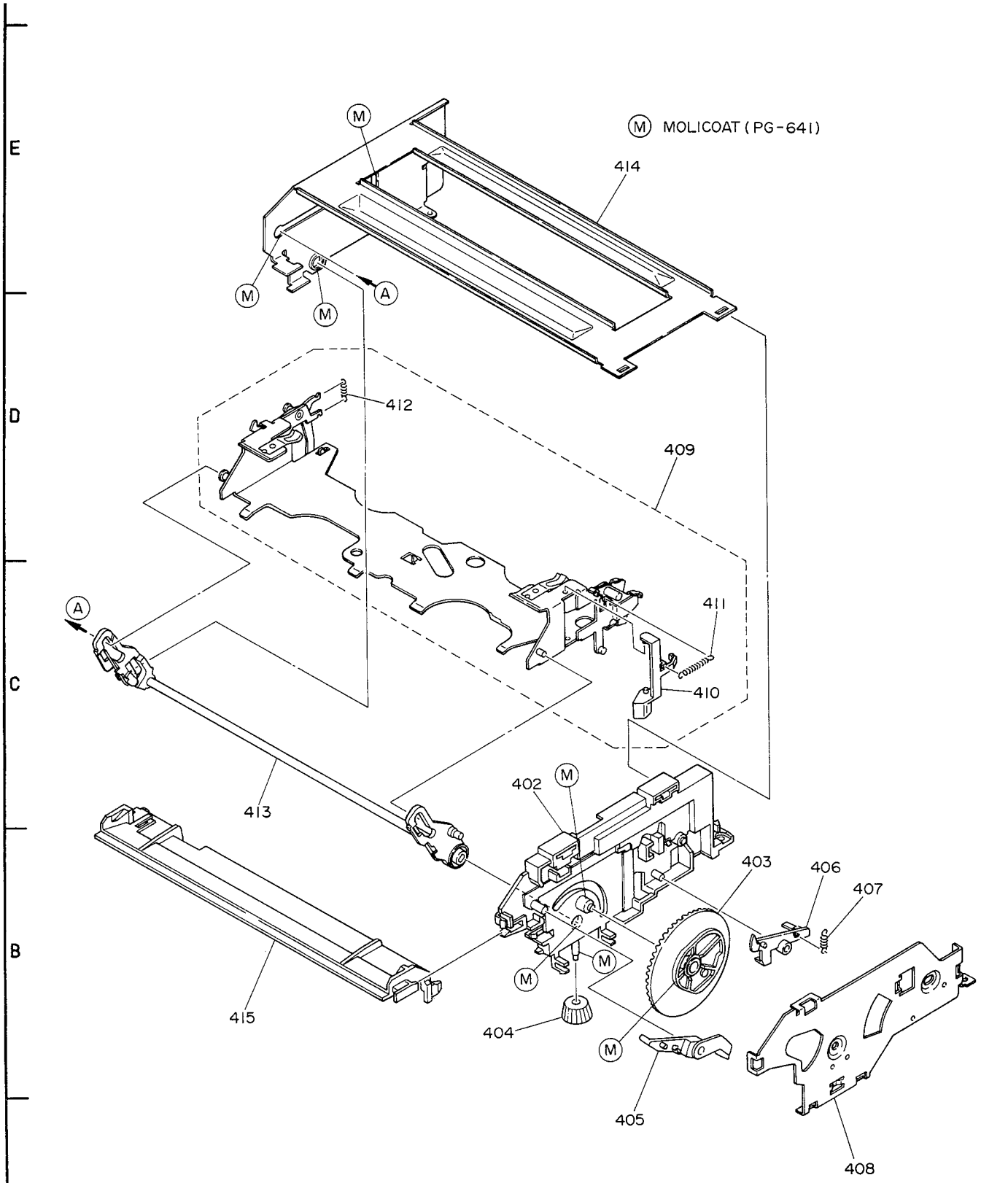
2. CHASSIS SECTION (TOP VIEW)



3. CHASSIS SECTION (BOTTOM VIEW)



4. CASSETTE LOADING MECHANISM SECTION



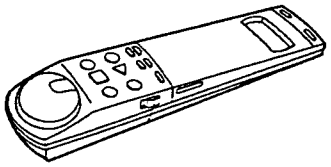
REPLACEMENT PARTS LIST
1. MECHANICAL PARTS LIST

SYMBOL-NO	P-NO	DESCRIPTION
		FOR FINAL ASSEMBLY
101	6009463	COVER, TOP
102	6009472	COVER, BOTTOM
103	4731631	PANEL FRONT[UKN]
103	4731632	PANEL FRONT[CT]
103	4731637	PANEL FRONT[VPS]
104	4725403	DOOR, CASSETTE[UKN]
104	4725404	DOOR, CASSETTE[CT, VPS]
110	4330711	LEG
⚠111	5850797	CORD, POWER[CT, VPS]
⚠111	5852752	CORD, POWER[UKN]
112	4590321	STOPPER, DOOR
115	4725463	PANEL, REAR
118	1730401	RF/TUNER IF UNIT[CT, VPS]
118	1730473	TUNER IF UNIT[UKN]
126	6551851	SPRING, DOOR
128	4842811	PLATE
130	4591431	CUSHION[VPS]
131	6562924	RUBBER
132	6810651	HOLDER, CBA
133	6562924	RUBBER
138	7415793	BRACKET
140	6529132	PLATE
142	4843492	COVER, SHIELD[VPS]
202	6500761	MOTOR, LOADING
203	6441371	GEAR
204	6441392	GEAR
205	6441403	GEAR
206	6441381	GEAR
207	6823133	ARM
208	6823171	ARM, OPERATION
209	6441421	GEAR
210	6500332	PLATE
211	6558551	SPRING
212	6405182	GEAR (HEPM)[UKN]
212	6405183	GEAR[CT, VPS]
213	7788347	WASHER
214	6405191	GEAR(UKN)
214	6405192	GEAR, LOADING(R)[VPS]
214	6406291	GEAR(R)[CT]
215	6401445	ARM
216	6522979	SPRING
217	6500841	WASHER
218	6441433	GEAR, CHANGE
219	6522978	SPRING
220	6823183	ARM
221	6441411	GEAR
222	6823314	ARM
223	6416631	REEL, TABLE(S)
224	6416651	REEL, TABLE(T)[UKN]
224	6416652	REEL, TABLE(T)[CT, VPS]
225	4583333	WASHER[CT, VPS]
225	7789126	WASHER[UKN]
226	6823195	ARM, BRAKE(R)
227	6823229	ARM, BRAKE(L)
228	6318613	SPRING
229	6823271	BRAKE
230	6823261	BRAKE
231	6500414	ARM
232	6823251	GEAR
233	6823292	BRAKE
234	6558452	SPRING
236	6638942	BASE, GUIDE ROLLER(I)
237	4589381	GUIDE ROLLER[CT, VPS]
237	6358561	GUIDE ROLLER[UKN]
238	6638954	BASE, GUIDE ROLLER(O)[UKN, VPS]
238	6638955	BASE, GUIDE ROLLER(O)[CT]
239	4587681	GEAR, LOADING(L)[CT, VPS]
239	6500504	GEAR, LOADING(L)[UKN]
240	4587671	GEAR, LOADING(R)[CT, VPS]
240	6500463	GEAR, LOADING(R)[UKN]
241	6823537	GEAR, MODE
242	4587761	PLATE[CT, VPS]
242	6358481	PLATE[UKN]
243	6823542	GEAR
244	6823333	PULLEY
245	6500841	WASHER
246	1470084	DC MOTOR
247	6358101	BELT[CT, VPS]
247	6359063	BELT[UKN]
248	6823424	ARM
249	6553361	SPRING
250	6823435	ARM[UKN, VPS]
250	6823437	ARM, OPERATION[CT]
251	6553301	SPRING
252	6823473	BAND, TENSION
253	6823511	SHAFT
254	4587661	ARM[CT, VPS]
254	4825252	ARM, TENSION[UKN]
255	6553352	SPRING
256	6638936	ARM
257	6823521	GEAR, CAM
258	6823445	BRACKET
259	6500431	ROLLER, PRESSURE[UKN]
259	6500432	ROLLER, PRESSURE[CT, VPS]
260	5434152	HEAD[UKN, VPS]
260	5434153	HEAD[CT]
261	4589841	BASE, HEAD[UKN]
261	6500593	BASE, AC HEAD[CT, VPS]
262	6304906	SPRING[UKN, VPS]
262	6554301	SPRING[CT]
263	6553151	SPRING
264	7785673	NUT
265	6638903	BASE, CYLINDER
267	5794062	BRUSH
268	5423081	HEAD, FULL ERASE
270	6500701	BRACKET[UKN]
270	6500704	BRACKET[CT, VPS]
271	6558502	SPRING
274	6320576	SPRING
275	6816211	WORM
402	6823612	BRACKET[CT, VPS]
402	6823613	BRACKET[UKN]
403	6823621	GEAR
404	6823631	GEAR
405	6823642	ARM
406	6823652	ARM[CT, VPS]
406	6823653	ARM[UKN]
407	6558531	SPRING
408	6500612	BRACKET
409	6500622	HOLDER[UKN]
409	6500623	HOLDER[CT, VPS]
410	6823691	ARM
411	6558541	SPRING
412	6558561	SPRING
413	6823663	ARM
414	6500671	BRACKET[CT, VPS]
414	6500672	BRACKET[UKN]

SYMBOL-NO	P-NO	DESCRIPTION
415	6823701	HOLDER
501	5435701	CYLINDER, UPPER(CY-G5P1) [CT, VPS]
501	5435721	CYLINDER, UPPER(CY-G6S1) [UKN]
502	5435691	CYLINDER, ASSY(CY-G5P1) [CT, VPS]
502	5435711	CYLINDER ASSY(CY-G6S1) [UKN]
901	8699410	SCREW(3X10)
902	8699412	SCREW (3X12) BLACK
903	8741406	SCREW(3X6)
905	8611406	SCREW(3X6)
906	8741406	SCREW(3X6)
908	7781138	SCREW (3X10BT)
910	8699406	SCREW (3X6)
915	0671305	DT SCREW-2.6MMDX5MM
951	0711304	SCREW(2.6X4)
952	0711312	PAN HEAD SCREW - 2.6MMD X 12MM
953	8691306	BT SCREW 2.6MM
954	0711306	PAN HEAD SCREW-2.6MMDX6MM
955	7773741	SCREW
956	4528181	SCREW
957	7775582	SCREW
958	0671308	DT SCREW-2.6MMDX8MM
960	8650914	SCREW(2.6X14)
991	7784131	SCREW (3X8)
		FOR ACCESSORIES
802	5616564	REMOTE HAND SET[CT, VPS]
802	5616573	REMOTE HAND SET(VT-RM352E) [UKN]
803	5860881	CABLE, PAL
804	PH10161	JACK COVER

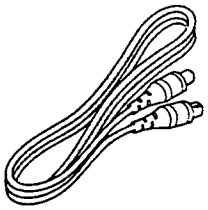
Accessories supplied

802



Remote Control Handset

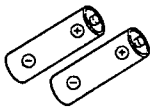
803



Aerial Cable for connecting this VTR and a TV

804

Dust preventive cover for VIDEO IN and AUDIO IN sockets on the front of the VTR



2 pcs.

Batteries for remote control handset (R6)

2. ELECTRICAL PARTS LIST

SYMBOL-NO	P-NO	DESCRIPTION
		CAPACITORS
C1401	0800038	ELECTROLYTIC 47UF 6.3V
C1402	0890045	CERAMIC DISC 0.047UF+80-20% 50V
C1404	0800003	ELECTROLYTIC 1UF 50V
C1405	0890121	CERAMIC DISC 33PF+-5% 50V
C1406	0890118	CERAMIC DISC 22PF+-5% 50V
C1407	0890112	CERAMIC CHIP 8PF+-0.5% 50V
C1408	0890112	CERAMIC CHIP 8PF+-0.5% 50V
C1411	0800009	ELECTROLYTIC 4.7UF 25V
C1441	0800047	ELECTROLYTIC 100UF 6.3V
C1442	0890022	CERAMIC DISC 100PF+-10% 50V
C1443	0880005	POLYESTER FILM 2200PF+-10% 50V
C1444	0800003	ELECTROLYTIC 1UF 50V
C1451	0890031	CERAMIC DISC 470PF+-10% 50V
C1452	0800015	ELECTROLYTIC 10UF 16V
C1503L	0800015	ELECTROLYTIC 10UF 16V
C1503R	0800015	ELECTROLYTIC 10UF 16V
C1505	0800015	ELECTROLYTIC 10UF 16V
C1507	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C1508	0207406	ELECTROLYTIC 10UF 10V
C1509	0207406	ELECTROLYTIC 10UF 10V
C1510	0890043	CERAMIC DISC 0.01UF+-20% 16V
C1512	0800041	ELECTROLYTIC 47UF 16V
C1515	0207406	ELECTROLYTIC 10UF 10V
C1516	0207455	ELECTROLYTIC 33UF 16V
C1519	0890015	CERAMIC DISC 33PF+-50% 50V
C1520	0800072	ELECTROLYTIC 470UF 6.3V
C1521	0890017	CERAMIC DISC 47PF+-5% 50V
C1522	0800032	ELECTROLYTIC 33UF 16V
C1523	0890043	CERAMIC DISC 0.01UF+-20% 16V
C1524	0800057	ELECTROLYTIC 220UF 10V
C1525	0800038	ELECTROLYTIC 47UF 6.3V
C1526	0890043	CERAMIC DISC 0.01UF+-20% 16V
C1527	0890045	CERAMIC DISC 0.047UF+80-20% 50V
C1528	0890045	CERAMIC DISC 0.047UF+80-20% 50V
C1529	0800044	ELECTROLYTIC 47UF 50V
C1530	0800015	ELECTROLYTIC 10UF 16V
C1532	0800048	ELECTROLYTIC 100UF 10V
C1533	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C1536	0800041	ELECTROLYTIC 47UF 16V
C1541	0800105	ELECTROLYTIC 0.33UF 50V
C1542	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C1543	0890068	CERAMIC DISC 39PF+-5% 50V[VPS]
C1544	0890017	CERAMIC DISC 47PF+-5% 50V[VPS]
C1801	0890043	CERAMIC DISC 0.01UF+-20% 16V[UKN]
C1802	0800138	ELECTROLYTIC 47UF 6.3V[UKN]
C1803	0890031	CERAMIC DISC 470PF+-10% 50V[UKN]
C1804	0890118	CERAMIC DISC 22PF+-5% 50V[UKN]
C1805	0890043	CERAMIC DISC 0.01UF+-20% 16V[UKN]
C1806	0890043	CERAMIC DISC 0.01UF+-20% 16V[UKN]
C1807	0890043	CERAMIC DISC 0.01UF+-20% 16V[UKN]
C1808	0800015	ELECTROLYTIC 10UF 16V[UKN]
C1810	0890035	CERAMIC DISC 1000PF+-10% 50V[UKN]
C1812	0890035	CERAMIC DISC 1000PF+-10% 50V[UKN]
C1813	0800041	ELECTROLYTIC 47UF 16V[UKN]
C1814	0800041	ELECTROLYTIC 47UF 16V[UKN]
C1817	0800122	ELECTROLYTIC 10UF 16V[UKN]
C1818	0800128	ELECTROLYTIC 22UF 16V[UKN]
C1821	0800122	ELECTROLYTIC 10UF 16V[UKN]
C1822	0800128	ELECTROLYTIC 22UF 16V[UKN]
C1823	0800141	ELECTROLYTIC 47UF 16V[UKN]
C1824	0800118	ELECTROLYTIC 4.7UF 35V[UKN]
C1825	0800141	ELECTROLYTIC 47UF 16V[UKN]
C1826	0890043	CERAMIC DISC 0.01UF+-20% 16V[UKN]
C1827	0800138	ELECTROLYTIC 47UF 6.3V[UKN]
C1828	0890043	CERAMIC DISC 0.01UF+-20% 16V[UKN]
C1829	0800015	ELECTROLYTIC 10UF 16V[UKN]
C1830	0800015	ELECTROLYTIC 10UF 16V[UKN]
C1831	0800003	ELECTROLYTIC 1UF 50V[UKN]
C1832	0800109	ELECTROLYTIC 1.0UF 50V[UKN]
C1833	0890035	CERAMIC DISC 1000PF+-10% 50V[UKN]
C1851	0800112	ELECTROLYTIC 2.2UF 50V[CT, VPS]
C1852	0800112	ELECTROLYTIC 2.2UF 50V[CT, VPS]
C1854	0880062	POLYESTER FILM 0.22UF+-10% 50V[CT, VPS]
C1855	0800145	ELECTROLYTIC 100UF 16V[CT, VPS]
C1856	0890043	CERAMIC DISC 0.01UF+-20% 16V[CT, VPS]
C1857	0800141	ELECTROLYTIC 47UF 16V[CT, VPS]
C1858	0890043	CERAMIC DISC 0.01UF+-20% 16V[CT, VPS]
C1859	0800112	ELECTROLYTIC 2.2UF 50V[CT, VPS]
C1860	0800112	ELECTROLYTIC 2.2UF 50V[CT, VPS]
C1861	0800112	ELECTROLYTIC 2.2UF 50V[CT, VPS]
C1862	0800117	ELECTROLYTIC 4.7UF 25V[CT, VPS]
C1863	0800117	ELECTROLYTIC 4.7UF 25V[CT, VPS]
C1864	0800112	ELECTROLYTIC 2.2UF 50V[CT, VPS]
C1865	0800112	ELECTROLYTIC 2.2UF 50V[CT, VPS]
C201	0800072	ELECTROLYTIC 470UF 6.3V
C202	0890102	CERAMIC DISC 0.022UF+80-20% 50V
C203	0800015	ELECTROLYTIC 10UF 16V
C204	0890102	CERAMIC DISC 0.022UF+80-20% 50V
C205	0800015	ELECTROLYTIC 10UF 16V
C207	0800003	ELECTROLYTIC 1UF 50V
C208	0890016	CERAMIC DISC 39PF+-50% 50V
C209	0890018	CERAMIC DISC 56PF+-50% 50V
C210	0890013	CERAMIC DISC 22PF+-5% 50V
C2101	0890045	CERAMIC DISC 0.047UF+80-20% 50V
C211	0890043	CERAMIC DISC 0.01UF+-20% 16V
C212	0890018	CERAMIC DISC 56PF+-50% 50V
C213	0890009	CERAMIC DISC 12PF+-5% 50V
C214	0890017	CERAMIC DISC 47PF+-5% 50V
C215	0890018	CERAMIC DISC 56PF+-50% 50V
C216	0890005	CERAMIC DISC 4.7PF 50V
C217	0890019	CERAMIC DISC 68PF+-50% 50V
C218	0890043	CERAMIC DISC 0.01UF+-20% 16V
C219	0890021	CERAMIC DISC 82PF+-10% 50V
C220	0890027	CERAMIC DISC 270PF+-10% 50V
C221	0890012	CERAMIC DISC 18PF+-5% 50V[CT, VPS]
C221	0890014	CERAMIC DISC 27PF+-50% 50V[UKN]
C222	0890022	CERAMIC DISC 100PF+-10% 50V
C223	0890006	CERAMIC DISC 6.8PF+-10% 50V
C224	0890013	CERAMIC DISC 22PF+-5% 50V
C225	0890043	CERAMIC DISC 0.01UF+-20% 16V
C226	0207456	ELECTROLYTIC 1UF 50V
C227	0890013	CERAMIC DISC 22PF+-5% 50V
C228	0800003	ELECTROLYTIC 1UF 50V
C229	0890043	CERAMIC DISC 0.01UF+-20% 16V
C230	0800003	ELECTROLYTIC 1UF 50V
C231	0800038	ELECTROLYTIC 47UF 6.3V
C232	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C233	0890015	CERAMIC DISC 33PF+-50% 50V
C234	0890014	CERAMIC DISC 27PF+-50% 50V
C235	0890013	CERAMIC DISC 22PF+-5% 50V
C236	0890015	CERAMIC DISC 33PF+-50% 50V
C237	0890018	CERAMIC DISC 56PF+-50% 50V
C238	0800015	ELECTROLYTIC 10UF 16V
C239	0890033	CERAMIC DISC 680PF+-10% 50V
C240	0890026	CERAMIC DISC 220PF+-10% 50V[CT, VPS]
C241	0800015	ELECTROLYTIC 10UF 16V
C242	0890044	CERAMIC DISC 0.022UF+80-20% 25V

SYMBOL-NO	P-NO	DESCRIPTION
C243	0800038	ELECTROLYTIC 47UF 6.3V
C245	0890025	CERAMIC DISC 180PF+-10% 50V
C246	0890043	CERAMIC DISC 0.01UF+-20% 16V
C250	0890043	CERAMIC DISC 0.01UF+-20% 16V
C251	0890043	CERAMIC DISC 0.01UF+-20% 16V
C284	0890045	CERAMIC DISC 0.047UF+80-20% 50V
C285	0890045	CERAMIC DISC 0.047UF+80-20% 50V
C301	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C302	0800038	ELECTROLYTIC 47UF 6.3V
C303	0800003	ELECTROLYTIC 1UF 50V
C304	0800003	ELECTROLYTIC 1UF 50V
C305	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C306	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C307	0800003	ELECTROLYTIC 1UF 50V
C308	0800003	ELECTROLYTIC 1UF 50V
C309	0890102	CERAMIC DISC 0.022UF+80-20% 50V
C310	0890043	CERAMIC DISC 0.01UF+-20% 16V
C311	0890043	CERAMIC DISC 0.01UF+-20% 16V
C312	0880017	POLYESTER FILM 0.15UF+-10% 50V
C313	0890028	CERAMIC DISC 330PF+-10% 50V
C315	0890023	CERAMIC DISC 120PF+-10% 50V
C316	0890043	CERAMIC DISC 0.01UF+-20% 16V
C319	0890043	CERAMIC DISC 0.01UF+-20% 16V
C320	0890043	CERAMIC DISC 0.01UF+-20% 16V
C322	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C324	0890012	CERAMIC DISC 18PF+-5% 50V
C326	0890027	CERAMIC DISC 270PF+-10% 50V
C327	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C3501	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C3502	0890035	CERAMIC DISC 1000PF+-10% 50V
C3503	0890035	CERAMIC DISC 1000PF+-10% 50V
C401	0800032	ELECTROLYTIC 33UF 16V
C402	0890038	CERAMIC DISC 3300PF+-20% 16V
C403	0890043	CERAMIC DISC 0.01UF+-20% 16V
C404	0268449	MYLAR 0.047UF+-5% 100V
C405	0890026	CERAMIC DISC 220PF+-10% 50V
C406	0890043	CERAMIC DISC 0.01UF+-20% 16V
C407	0800041	ELECTROLYTIC 47UF 16V
C409	0209643	CERAMIC DISC 0.022UF+-10% 16V[UKN]
C410	0209643	CERAMIC DISC 0.022UF+-10% 16V
C412	0890034	CERAMIC DISC 820PF+-10% 5V
C413	0890094	CERAMIC DISC 3300PF+-10% 25V[UKN]
C413	0890096	CERAMIC DISC 4700PF+-10% 25V[CT, VPS]
C414	0207461	ELECTROLYTIC 22UF 16V
C415	0209642	CERAMIC DISC 15000PF+-10% 16V
C416	0800015	ELECTROLYTIC 10UF 16V
C418	0800015	ELECTROLYTIC 10UF 16V
C420	0800122	ELECTROLYTIC 10UF 16V
C421	0800122	ELECTROLYTIC 10UF 16V
C422	0890035	CERAMIC DISC 1000PF+-10% 50V[CT, VPS]
C422	0890039	CERAMIC DISC 4700PF+-20% 16V[UKN]
C424	0890017	CERAMIC DISC 47PF+-5% 50V
C4501	0890035	CERAMIC DISC 1000PF+-10% 50V
C4502	0890035	CERAMIC DISC 1000PF+-10% 50V
C4503	0890035	CERAMIC DISC 1000PF+-10% 50V
C4504	0890035	CERAMIC DISC 1000PF+-10% 50V
C4505	0890035	CERAMIC DISC 1000PF+-10% 50V
C4506	0890035	CERAMIC DISC 1000PF+-10% 50V
C4507	0890035	CERAMIC DISC 1000PF+-10% 50V
C4508	0890035	CERAMIC DISC 1000PF+-10% 50V
C4510	0800138	ELECTROLYTIC 47UF 6.3V
C4511	0800138	ELECTROLYTIC 47UF 6.3V
C501	0800048	ELECTROLYTIC 100UF 10V
C503L	0800118	ELECTROLYTIC 4.7UF 35V
C503R	0800118	ELECTROLYTIC 4.7UF 35V
C504L	0800118	ELECTROLYTIC 4.7UF 35V
C504R	0800118	ELECTROLYTIC 4.7UF 35V
C508L	0800032	ELECTROLYTIC 33UF 16V
C508R	0800032	ELECTROLYTIC 33UF 16V
C509L	0209645	CERAMIC DISC 47000PF+-10% 16V
C509R	0209645	CERAMIC DISC 47000PF+-10% 16V
C510L	0800112	ELECTROLYTIC 2.2UF 50V
C510R	0800112	ELECTROLYTIC 2.2UF 50V
C511L	0800039	ELECTROLYTIC 47UF 10V
C511R	0800039	ELECTROLYTIC 47UF 10V
C512L	0209642	CERAMIC DISC 15000PF+-10% 16V
C512R	0209642	CERAMIC DISC 15000PF+-10% 16V
C513	0800022	ELECTROLYTIC 22UF 10V
C514L	0209641	CERAMIC DISC 10000PF+-10% 16V
C514R	0209641	CERAMIC DISC 10000PF+-10% 16V
C515L	0890035	CERAMIC DISC 1000PF+-10% 50V
C515R	0890035	CERAMIC DISC 1000PF+-10% 50V
C516	0800047	ELECTROLYTIC 100UF 6.3V
C517	0800015	ELECTROLYTIC 10UF 16V
C518	0890043	CERAMIC DISC 0.01UF+-20% 16V
C519	0890101	CERAMIC DISC 0.01UF+-20% 16V
C521	0800047	ELECTROLYTIC 100UF 6.3V
C522	0890043	CERAMIC DISC 0.01UF+-20% 16V
C523	0880018	POLYESTER FILM 0.22UF+-10% 50V
C524	0890027	CERAMIC DISC 270PF+-10% 50V
C525L	0800118	ELECTROLYTIC 4.7UF 35V
C525R	0800118	ELECTROLYTIC 4.7UF 35V
C526	0890043	CERAMIC DISC 0.01UF+-20% 16V
C527	0800039	ELECTROLYTIC 47UF 10V
C528L	0800118	ELECTROLYTIC 4.7UF 35V
C528R	0800118	ELECTROLYTIC 4.7UF 35V
C529L	0800011	ELECTROLYTIC 4.7UF 35V[CT, VPS]
C529R	0800011	ELECTROLYTIC 4.7UF 35V[CT, VPS]
C530	0800041	ELECTROLYTIC 47UF 16V
C531	0800122	ELECTROLYTIC 10UF 16V
C532	0890039	CERAMIC DISC 4700PF+-20% 16V
C534	0800048	ELECTROLYTIC 100UF 10V
C536	0800015	ELECTROLYTIC 10UF 16V
C537L	0800118	ELECTROLYTIC 4.7UF 35V
C537R	0800118	ELECTROLYTIC 4.7UF 35V
C538	0800011	ELECTROLYTIC 4.7UF 35V
C539	0800118	ELECTROLYTIC 4.7UF 35V
C541L	0800015	ELECTROLYTIC 10UF 16V[CT, VPS]
C541R	0800015	ELECTROLYTIC 10UF 16V[CT, VPS]
C601	0880011	POLYESTER FILM 0.015UF+-10% 50V
C602	0800005	ELECTROLYTIC 2.2UF 50V
C603	0207456	ELECTROLYTIC 1UF 50V
C604	0207459	ELECTROLYTIC 0.47UF 50V
C605	0800122	ELECTROLYTIC 10UF 16V
C607	0800122	ELECTROLYTIC 10UF 16V
C609	0207401	ELECTROLYTIC 0.33UF 50V
C610	0880004	POLYESTER FILM 1500PF+-10% 50V
C611	0890035	CERAMIC DISC 1000PF+-10% 50V
C612	0800029	ELECTROLYTIC 33UF 6.3V
C613	0800015	ELECTROLYTIC 10UF 16V
C614	0800005	ELECTROLYTIC 2.2UF 50V
C617	0880048	MYLAR 0.022UF+-10% 50V
C619	0890101	CERAMIC DISC 0.01UF+-20% 16V
C620	0880013	POLYESTER FILM 0.033UF+-10% 50V
C621	0890013	CERAMIC DISC 22PF+-5% 50V
C624	0890038	CERAMIC DISC 3300PF+-20% 16V
C625	0800022	ELECTROLYTIC 22UF 10V
C626	0890046	CERAMIC DISC 0.1UF+80-20% 50V
C632	0890045	CERAMIC DISC 0.047UF+80-20% 50V
C634	0890043	CERAMIC DISC 0.01UF+-20% 16V

SYMBOL-NO	P-NO	DESCRIPTION
C635	0880055	MYLAR 0.068UF+-10% 50V
C641	0890046	CERAMIC DISC 0.1UF+80-20% 50V
C651	0800022	ELECTROLYTIC 22UF 10V
C652	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C653	0800015	ELECTROLYTIC 10UF 16V
C654	0800015	ELECTROLYTIC 10UF 16V
C655	0890023	CERAMIC DISC 120PF+-10% 50V
C656	0890028	CERAMIC DISC 330PF+-10% 50V
C801	0890046	CERAMIC DISC 0.1UF+80-20% 50V
C803	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C805	0890045	CERAMIC DISC 0.047UF+80-20% 50V
C806	0890024	CERAMIC DISC 150PF+-10% 50V
C807	0890043	CERAMIC DISC 0.01UF+-20% 16V
C808	0890043	CERAMIC DISC 0.01UF+-20% 16V
C809	0800038	ELECTROLYTIC 47UF 6.3V
C810	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C811	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C812	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C813	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C814	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C815	0890071	CERAMIC DISC 56PF+-5% 50V[VPS]
C822L	0800015	ELECTROLYTIC 10UF 16V
C822R	0800015	ELECTROLYTIC 10UF 16V
C823L	0800015	ELECTROLYTIC 10UF 16V
C823R	0800015	ELECTROLYTIC 10UF 16V
C844	0800015	ELECTROLYTIC 10UF 16V
C846	0800038	ELECTROLYTIC 47UF 6.3V
C848	0800022	ELECTROLYTIC 22UF 10V
C902	0890046	CERAMIC DISC 0.1UF+80-20% 50V
C903	0800038	ELECTROLYTIC 47UF 6.3V
C904	0217516	CAPACITOR 0.047UF+80-20% 5.5V
C905	0800005	ELECTROLYTIC 2.2UF 50V
C906	0890046	CERAMIC DISC 0.1UF+80-20% 50V
C908	0890118	CERAMIC DISC 22PF+-5% 50V
C909	0890118	CERAMIC DISC 22PF+-5% 50V
C911	0800044	ELECTROLYTIC 47UF 50V
C914	0208379	CERAMIC DISC 0.01UF+-30% 16V
C915	0208379	CERAMIC DISC 0.01UF+-30% 16V
C916	0208379	CERAMIC DISC 0.01UF+-30% 16V
C917	0208379	CERAMIC DISC 0.01UF+-30% 16V
C918	0800032	ELECTROLYTIC 33UF 16V
C919	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C920	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C922	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C926	0890046	CERAMIC DISC 0.1UF+80-20% 50V

RESISTORS

R1401	0700053	CARBON FILM 8.2KOHM+-5% 1/8W
R1402	0700053	CARBON FILM 8.2KOHM+-5% 1/8W
R1411	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R1412	0700044	CARBON FILM 1.8KOHM+-5% 1/8W
R1414	0700027	CARBON FILM 100 OHM+-5% 1/8W
R1415	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R1441	0101733	METAL FILM 16.5KOHM+-1% 1/8W
R1442	0101736	METAL FILM 120KOHM+-1% 1/8W
R1443	0700076	CARBON FILM 470KOHM+-5% 1/8W
R1444	0700062	CARBON FILM 39KOHM+-5% 1/8W
R1451	0700027	CARBON FILM 100 OHM+-5% 1/8W
R1452	0700034	CARBON FILM 330 OHM+-5% 1/8W
R1453	0700036	CARBON FILM 470 OHM+-5% 1/8W
R1454	0700037	CARBON FILM 560 OHM+-5% 1/8W
R1505	0700028	CARBON FILM 120 OHM+-5% 1/8W
R1506	0700028	CARBON FILM 120 OHM+-5% 1/8W
R1507	0700028	CARBON FILM 120 OHM+-5% 1/8W[VPS]

SYMBOL-NO	P-NO	DESCRIPTION
R1509	0700058	CARBON FILM 22KOHM+-5% 1/8W
R1510	0700028	CARBON FILM 120 OHM+-5% 1/8W
R1511	0700053	CARBON FILM 8.2KOHM+-5% 1/8W
R1512	0101400	CARBON FILM 75 OHM+-5% 1/8W
R1513	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R1514	0700029	CARBON FILM 150 OHM+-5% 1/8W
R1515	0700031	CARBON FILM 180 OHM+-5% 1/8W
R1516	0700043	CARBON FILM 1.5KOHM+-5% 1/8W
R1517	0700075	CARBON FILM 390KOHM+-5% 1/8W
R1518	0700075	CARBON FILM 390KOHM+-5% 1/8W
R1519	0700067	CARBON FILM 100KOHM+-5% 1/8W
R1520	0700057	CARBON FILM 18KOHM+-5% 1/8W
R1522	0700044	CARBON FILM 1.8KOHM+-5% 1/8W
R1523	0700032	CARBON FILM 220 OHM+-5% 1/8W
R1524	0700042	CARBON FILM 1.2KOHM+-5% 1/8W
R1526	0700054	CARBON FILM 10KOHM+-5% 1/8W
R1527	0101841	CARBON FILM 4.7KOHM+-5% 1/4W
R1528	0700042	CARBON FILM 1.2KOHM+-5% 1/8W
R1530	0700067	CARBON FILM 100KOHM+-5% 1/8W
R1532	0700063	CARBON FILM 47KOHM+-5% 1/8W
R1533	0700063	CARBON FILM 47KOHM+-5% 1/8W
R1534L	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R1534R	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R1535L	0700047	CARBON FILM 3.3KOHM+-5% 1/8W[CT, VPS]
R1535R	0700047	CARBON FILM 3.3KOHM+-5% 1/8W[CT, VPS]
R1536	0700067	CARBON FILM 100KOHM+-5% 1/8W
R1541	0700045	CARBON FILM 2.2KOHM+-5% 1/8W[UKN]
R1802	0700054	CARBON FILM 10KOHM+-5% 1/8W[UKN]
R1805	0700046	CARBON FILM 2.7KOHM+-5% 1/8W[UKN]
R1807	0700046	CARBON FILM 2.7KOHM+-5% 1/8W[UKN]
R1809	0700047	CARBON FILM 3.3KOHM+-5% 1/8W[UKN]
R1810	0700044	CARBON FILM 1.8KOHM+-5% 1/8W[UKN]
R1811	0700059	CARBON FILM 27KOHM+-5% 1/8W[UKN]
R1812	0700054	CARBON FILM 10KOHM+-5% 1/8W[UKN]
R1814	0700054	CARBON FILM 10KOHM+-5% 1/8W[UKN]
R1815	0700047	CARBON FILM 3.3KOHM+-5% 1/8W[UKN]
R1816	0700044	CARBON FILM 1.8KOHM+-5% 1/8W[UKN]
R1817	0700059	CARBON FILM 27KOHM+-5% 1/8W[UKN]
R1818	0700054	CARBON FILM 10KOHM+-5% 1/8W[UKN]
R1820	0700054	CARBON FILM 10KOHM+-5% 1/8W[UKN]
R1821	0700058	CARBON FILM 22KOHM+-5% 1/8W[UKN]
R1822	0700064	CARBON FILM 56KOHM+-5% 1/8W[UKN]
R1823	0700054	CARBON FILM 10KOHM+-5% 1/8W[UKN]
R1824	0700059	CARBON FILM 27KOHM+-5% 1/8W[UKN]
R1825	0700026	CARBON FILM 82 OHM+-5% 1/8W[UKN]
R1826	0700053	CARBON FILM 8.2KOHM+-5% 1/8W[UKN]
R1827	0700031	CARBON FILM 180 OHM+-5% 1/8W[UKN]
R1828	0700026	CARBON FILM 82 OHM+-5% 1/8W[UKN]
R1829	0700067	CARBON FILM 100KOHM+-5% 1/8W[UKN]
R1835	0700021	CARBON FILM 33 OHM+-5% 1/8W[UKN]
R1836	0700027	CARBON FILM 100 OHM+-5% 1/8W[UKN]
R1837	0700041	CARBON FILM 1.0KOHM+-5% 1/8W[UKN]
R1851	0700037	CARBON FILM 560 OHM+-5% 1/8W[CT, VPS]
R1852	0700032	CARBON FILM 220 OHM+-5% 1/8WC[CT, VPS]
R1853	0700049	CARBON FILM 4.7KOHM+-5% 1/8W[CT, VPS]
R1854	0700037	CARBON FILM 560 OHM+-5% 1/8W[CT, VPS]
R1855	0700028	CARBON FILM 120 OHM+-5% 1/8W[CT, VPS]
R1856	0700028	CARBON FILM 120 OHM+-5% 1/8W[CT, VPS]
R1857	0700049	CARBON FILM 4.7KOHM+-5% 1/8W[CT, VPS]
R1858	0700059	CARBON FILM 27KOHM+-5% 1/8W[CT, VPS]
R1859	0700058	CARBON FILM 22KOHM+-5% 1/8W[CT, VPS]
R1866	0700046	CARBON FILM 2.7KOHM+-5% 1/8W[CT, VPS]
R201	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R202	0700057	CARBON FILM 18KOHM+-5% 1/8W
R203	0700031	CARBON FILM 180 OHM+-5% 1/8W[UKN]

SYMBOL-NO	P-NO	DESCRIPTION
R203	0700036	CARBON FILM 470 OHM+-5% 1/8W[CT, VPS]
R204	0700046	CARBON FILM 2.7KOHM+-5% 1/8W
R205	0700046	CARBON FILM 2.7KOHM+-5% 1/8W
R206	0700036	CARBON FILM 470 OHM+-5% 1/8W
R207	0700036	CARBON FILM 470 OHM+-5% 1/8W
R208	0700036	CARBON FILM 470 OHM+-5% 1/8W
R209	0700039	CARBON FILM 820 OHM+-5% 1/8W
R211	0700036	CARBON FILM 470 OHM+-5% 1/8W
R212	0700037	CARBON FILM 560 OHM+-5% 1/8W
R213	0700033	CARBON FILM 270 OHM+-5% 1/8W
R214	0700027	CARBON FILM 100 OHM+-5% 1/8W[CT, VPS]
R214	0700028	CARBON FILM 120 OHM+-5% 1/8W[UKN]
R215	0700032	CARBON FILM 220 OHM+-5% 1/8W
R216	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R217	0700046	CARBON FILM 2.7KOHM+-5% 1/8W
R218	0700043	CARBON FILM 1.5KOHM+-5% 1/8W
R219	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R220	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R221	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R222	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R223	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R225	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R226	0700053	CARBON FILM 8.2KOHM+-5% 1/8W
R227	0700032	CARBON FILM 220 OHM+-5% 1/8W
R228	0700052	CARBON FILM 6.8KOHM+-5% 1/8W
R229	0700059	CARBON FILM 27KOHM+-5% 1/8W
R230	0700035	CARBON FILM 390 OHM+-5% 1/8W
R231	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R232	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R233	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R234	0700044	CARBON FILM 1.8KOHM+-5% 1/8W[UKN]
R234	0700048	CARBON FILM 3.9KOHM+-5% 1/8W[CT, VPS]
R235	0700067	CARBON FILM 100KOHM+-5% 1/8W
R237	0700055	CARBON FILM 12KOHM+-5% 1/8W
R238	0700055	CARBON FILM 12KOHM+-5% 1/8W
R239	0700054	CARBON FILM 10KOHM+-5% 1/8W
R240	0700054	CARBON FILM 10KOHM+-5% 1/8W
R241	0700043	CARBON FILM 1.5KOHM+-5% 1/8W
R246	0700054	CARBON FILM 10KOHM+-5% 1/8W
R247	0700054	CARBON FILM 10KOHM+-5% 1/8W
R248	0700039	CARBON FILM 820 OHM+-5% 1/8W
R249	0700054	CARBON FILM 10KOHM+-5% 1/8W
R250	0700043	CARBON FILM 1.5KOHM+-5% 1/8W
R251	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R252	0700036	CARBON FILM 470 OHM+-5% 1/8W
R253	0700028	CARBON FILM 1200HM+-5% 1/8W
R301	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R302	0700054	CARBON FILM 10KOHM+-5% 1/8W
R303	0700054	CARBON FILM 10KOHM+-5% 1/8W
R304	0700039	CARBON FILM 820 OHM+-5% 1/8W
R305	0700029	CARBON FILM 150 OHM+-5% 1/8W
R309	0700033	CARBON FILM 270 OHM+-5% 1/8W
R310	0700042	CARBON FILM 1.2KOHM+-5% 1/8W
R311	0700056	CARBON FILM 15KOHM+-5% 1/8W
R312	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R313	0700056	CARBON FILM 15KOHM+-5% 1/8W
R314	0700061	CARBON FILM 33KOHM+-5% 1/8W
R315	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R316	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R317	0700038	CARBON FILM 680 OHM+-5% 1/8W[UKN]
R317	0700042	CARBON FILM 1.2KOHM+-5% 1/8W[CT, VPS]
R318	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R319	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R321	0700055	CARBON FILM 12KOHM+-5% 1/8W
R322	0700055	CARBON FILM 12KOHM+-5% 1/8W

SYMBOL-NO	P-NO	DESCRIPTION
R323	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R324	0700036	CARBON FILM 470 OHM+-5% 1/8W
R325	0700049	CARBON FILM 4.7KOHM+-5% 1/8W
R326	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R328	0700061	CARBON FILM 33KOHM+-5% 1/8W
R329	0700058	CARBON FILM 22KOHM+-5% 1/8W
R330	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R3501	0101400	CARBON FILM 75 OHM+-5% 1/8W
R401	0700014	CARBON FILM 10 OHM+-5% 1/8W
R402	0700014	CARBON FILM 10 OHM+-5% 1/8W
R404	0700059	CARBON FILM 27KOHM+-5% 1/8W
R405	0700039	CARBON FILM 820 OHM+-5% 1/8W[UKN]
R406	0700033	CARBON FILM 270 OHM+-5% 1/8W
R407	0700057	CARBON FILM 18KOHM+-5% 1/8W
R408	0700063	CARBON FILM 47KOHM+-5% 1/8W
R409	0700081	CARBON FILM 1.0MOHM+-5% 1/8W
R410	0700056	CARBON FILM 15KOHM+-5% 1/8W[CT, VPS]
R410	0700058	CARBON FILM 22KOHM+-5% 1/8W[UKN]
R412	0700045	CARBON FILM 2.2KOHM+-5% 1/8W[UKN]
R412	0700053	CARBON FILM 8.2KOHM+-5% 1/8W[CT, VPS]
R414	0700072	CARBON FILM 220KOHM+-5% 1/8W
R415	0700052	CARBON FILM 6.8KOHM+-5% 1/8W
R416	0700034	CARBON FILM 330 OHM+-5% 1/8W
R417	0700059	CARBON FILM 27KOHM+-5% 1/8W
R419	0700061	CARBON FILM 33KOHM+-5% 1/8W
R420	0700049	CARBON FILM 4.7KOHM+-5% 1/8W
R422	0700043	CARBON FILM 1.5KOHM+-5% 1/8W
R425	0700063	CARBON FILM 47KOHM+-5% 1/8W
R427	0700063	CARBON FILM 47KOHM+-5% 1/8W
R434	0700072	CARBON FILM 220KOHM+-5% 1/8W
R4501	0700067	CARBON FILM 100KOHM+-5% 1/8W
R4502	0700067	CARBON FILM 100KOHM+-5% 1/8W
R4503	0700038	CARBON FILM 680 OHM+-5% 1/8W
R4504	0700038	CARBON FILM 680 OHM+-5% 1/8W
R4505	0101400	CARBON FILM 75 OHM+-5% 1/8W
R4506	0101400	CARBON FILM 75 OHM+-5% 1/8W
R4507	0101400	CARBON FILM 75 OHM+-5% 1/8W
R4508	0700067	CARBON FILM 100KOHM+-5% 1/8W
R4509	0700067	CARBON FILM 100KOHM+-5% 1/8W
R4511	0700067	CARBON FILM 100KOHM+-5% 1/8W
R4512	0700067	CARBON FILM 100KOHM+-5% 1/8W
R4513	0700038	CARBON FILM 680 OHM+-5% 1/8W
R4514	0700038	CARBON FILM 680 OHM+-5% 1/8W
R501	0700059	CARBON FILM 27KOHM+-5% 1/8W
R502L	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R502R	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R503L	0700036	CARBON FILM 470 OHM+-5% 1/8W
R503R	0700036	CARBON FILM 470 OHM+-5% 1/8W
R504L	0700063	CARBON FILM 47KOHM+-5% 1/8W
R504R	0700063	CARBON FILM 47KOHM+-5% 1/8W
R505L	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R505R	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R506L	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R506R	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R507L	0700049	CARBON FILM 4.7KOHM+-5% 1/8W
R507R	0700049	CARBON FILM 4.7KOHM+-5% 1/8W
R508L	0700055	CARBON FILM 12KOHM+-5% 1/8W
R508R	0700055	CARBON FILM 12KOHM+-5% 1/8W
R509L	0700048	CARBON FILM 3.9KOHM+-5% 1/8W
R509R	0700048	CARBON FILM 3.9KOHM+-5% 1/8W
R511	0700058	CARBON FILM 22KOHM+-5% 1/8W
R513	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R514L	0101766	CHIP RESISTOR 12KOHM+-1% 1/8W
R514R	0101766	CHIP RESISTOR 12KOHM+-1% 1/8W
R515L	0700054	CARBON FILM 10KOHM+-5% 1/8W

SYMBOL-NO	P-NO	DESCRIPTION
R515R	0700047	CARBON FILM 3.3KOHM+-5% 1/8W
R516	0700075	CARBON FILM 390KOHM+-5% 1/8W
R518	0700081	CARBON FILM 1.0MOHM+-5% 1/8W
R519L	0700053	CARBON FILM 8.2KOHM+-5% 1/8W
R519R	0700053	CARBON FILM 8.2KOHM+-5% 1/8W
R520	0700067	CARBON FILM 100KOHM+-5% 1/8W
R521L	0700049	CARBON FILM 4.7KOHM+-5% 1/8W
R521R	0700049	CARBON FILM 4.7KOHM+-5% 1/8W
R522L	0700067	CARBON FILM 100KOHM+-5% 1/8W
R522R	0700067	CARBON FILM 100KOHM+-5% 1/8W
R523	0700071	CARBON FILM 180KOHM+-5% 1/8W
R524	0700074	CARBON FILM 330KOHM+-5% 1/8W
R528	0700054	CARBON FILM 10KOHM+-5% 1/8W
R529	0700045	CARBON FILM 2.2KOHM+-5% 1/8W[CT, VPS]
R529	0700048	CARBON FILM 3.9KOHM+-5% 1/8W[UKN]
R530L	0700039	CARBON FILM 820 OHM+-5% 1/8W
R530R	0700039	CARBON FILM 820 OHM+-5% 1/8W
R531L	0700048	CARBON FILM 3.9KOHM+-5% 1/8W[CT, VPS]
R531L	0700049	CARBON FILM 4.7KOHM+-5% 1/8W[UKN]
R531R	0700048	CARBON FILM 3.9KOHM+-5% 1/8W[CT, VPS]
R531R	0700049	CARBON FILM 4.7KOHM+-5% 1/8W[UKN]
R532L	0700049	CARBON FILM 4.7KOHM+-5% 1/8W
R532R	0700049	CARBON FILM 4.7KOHM+-5% 1/8W
R533L	0700042	CARBON FILM 1.2KOHM+-5% 1/8W
R533R	0700042	CARBON FILM 1.2KOHM+-5% 1/8W
R537	0700048	CARBON FILM 3.9KOHM+-5% 1/8W
R538L	0700057	CARBON FILM 18KOHM+-5% 1/8W
R538R	0700057	CARBON FILM 18KOHM+-5% 1/8W
R539	0700049	CARBON FILM 4.7KOHM+-5% 1/8W
R540L	0700068	CARBON FILM 120KOHM+-5% 1/8W[CT, VPS]
R540R	0700068	CARBON FILM 120KOHM+-5% 1/8W[CT, VPS]
R541L	0700067	CARBON FILM 100KOHM+-5% 1/8W[CT, VPS]
R541R	0700067	CARBON FILM 100KOHM+-5% 1/8W[CT, VPS]
R542L	0700062	CARBON FILM 39KOHM+-5% 1/8W[CT, VPS]
R542R	0700062	CARBON FILM 39KOHM+-5% 1/8W[CT, VPS]
R543L	0700063	CARBON FILM 47KOHM+-5% 1/8W[CT, VPS]
R543R	0700063	CARBON FILM 47KOHM+-5% 1/8W[CT, VPS]
R544L	0700028	CARBON FILM 120 OHM+-5% 1/8W[CT, VPS]
R544R	0700028	CARBON FILM 120 OHM+-5% 1/8W[CT, VPS]
R545	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R547	0700058	CARBON FILM 22KOHM+-5% 1/8W
R553	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R555	0700027	CARBON FILM 100 OHM+-5% 1/8W
R601	0700062	CARBON FILM 39KOHM+-5% 1/8W
R602	0700041	CARBON FILM 1.0KOHM+-5% 1/8W[UKN]
R603	0700081	CARBON FILM 1.0MOHM+-5% 1/8W
R604	0700073	CARBON FILM 270KOHM+-5% 1/8W
R605	0700061	CARBON FILM 33KOHM+-5% 1/8W
R606	0700061	CARBON FILM 33KOHM+-5% 1/8W
R607	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R609	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R610	0700081	CARBON FILM 1.0MOHM+-5% 1/8W
R611	0700062	CARBON FILM 39KOHM+-5% 1/8W
R612	0700068	CARBON FILM 120KOHM+-5% 1/8W
R613	0700065	CARBON FILM 68KOHM+-5% 1/8W
R614	0700057	CARBON FILM 18KOHM+-5% 1/8W
R615	0700065	CARBON FILM 68KOHM+-5% 1/8W
R616	0700081	CARBON FILM 1.0MOHM+-5% 1/8W
R617	0700067	CARBON FILM 100KOHM+-5% 1/8W
R618	0700038	CARBON FILM 680 OHM+-5% 1/8W
R619	0700038	CARBON FILM 680 OHM+-5% 1/8W
R620	0700072	CARBON FILM 220KOHM+-5% 1/8W
R621	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R622	0700063	CARBON FILM 47KOHM+-5% 1/8W
R623	0700081	CARBON FILM 1.0MOHM+-5% 1/8W
R624	0700049	CARBON FILM 4.7KOHM+-5% 1/8W
R625	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R627	0700049	CARBON FILM 4.7KOHM+-5% 1/8W
R628	0700062	CARBON FILM 39KOHM+-5% 1/8W
R629	0700036	CARBON FILM 470 OHM+-5% 1/8W
R630	0700055	CARBON FILM 12KOHM+-5% 1/8W
R631	0700046	CARBON FILM 2.7KOHM+-5% 1/8W
R632	0700081	CARBON FILM 1.0MOHM+-5% 1/8W
R638	0700081	CARBON FILM 1.0MOHM+-5% 1/8W
R640	0700052	CARBON FILM 6.8KOHM+-5% 1/8W
R642	0700048	CARBON FILM 3.9KOHM+-5% 1/8W[CT, VPS]
R642	0700054	CARBON FILM 10KOHM+-5% 1/8W[UKN]
R651	0700063	CARBON FILM 47KOHM+-5% 1/8W
R652	0700063	CARBON FILM 47KOHM+-5% 1/8W
R653	0700079	CARBON FILM 820KOHM+-5% 1/8W
R654	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R655	0700038	CARBON FILM 680 OHM+-5% 1/8W
R656	0700063	CARBON FILM 47KOHM+-5% 1/8W
R657	0700063	CARBON FILM 47KOHM+-5% 1/8W
R658	0700063	CARBON FILM 47KOHM+-5% 1/8W
R750	0700027	CARBON FILM 100 OHM+-5% 1/8W
R751	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R752	0700032	CARBON FILM 220 OHM+-5% 1/8W
R753	0700043	CARBON FILM 1.5KOHM+-5% 1/8W
R754	0700029	CARBON FILM 150 OHM+-5% 1/8W
R755	0700044	CARBON FILM 1.8KOHM+-5% 1/8W
R756	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R757	0700035	CARBON FILM 390 OHM+-5% 1/8W
R758	0700047	CARBON FILM 3.3KOHM+-5% 1/8W
R768	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R769	0700039	CARBON FILM 820 OHM+-5% 1/8W
R770	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R771	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R801	0700038	CARBON FILM 680 OHM+-5% 1/8W
R806	0700038	CARBON FILM 680 OHM+-5% 1/8W
R807	0700062	CARBON FILM 39KOHM+-5% 1/8W
R811	0700046	CARBON FILM 2.7KOHM+-5% 1/8W
R812	0700054	CARBON FILM 10KOHM+-5% 1/8W
R813	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R814	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R816	0700046	CARBON FILM 2.7KOHM+-5% 1/8W
R817	0700054	CARBON FILM 10KOHM+-5% 1/8W
R821L	0700067	CARBON FILM 100KOHM+-5% 1/8W
R821R	0700067	CARBON FILM 100KOHM+-5% 1/8W
R822L	0700067	CARBON FILM 100KOHM+-5% 1/8W
R822R	0700067	CARBON FILM 100KOHM+-5% 1/8W
R823L	0700067	CARBON FILM 100KOHM+-5% 1/8W
R823R	0700067	CARBON FILM 100KOHM+-5% 1/8W
R824L	0700067	CARBON FILM 100KOHM+-5% 1/8W
R824R	0700067	CARBON FILM 100KOHM+-5% 1/8W
R825L	0700047	CARBON FILM 3.3KOHM+-5% 1/8W
R825R	0700047	CARBON FILM 3.3KOHM+-5% 1/8W
R826L	0700053	CARBON FILM 8.2KOHM+-5% 1/8W[CT, VPS]
R826L	0700058	CARBON FILM 22KOHM+-5% 1/8W[UKN]
R826R	0700053	CARBON FILM 8.2KOHM+-5% 1/8W[CT, VPS]
R826R	0700058	CARBON FILM 22KOHM+-5% 1/8W[UKN]
R827L	0700051	CARBON FILM 5.6KOHM+-5% 1/8W[CT, VPS]
R827R	0700051	CARBON FILM 5.6KOHM+-5% 1/8W[CT, VPS]
R828L	0700052	CARBON FILM 6.8KOHM+-5% 1/8W[CT, VPS]
R828R	0700052	CARBON FILM 6.8KOHM+-5% 1/8W[CT, VPS]
R830L	0700057	CARBON FILM 18KOHM+-5% 1/8W[UKN]
R830R	0700057	CARBON FILM 18KOHM+-5% 1/8W[UKN]
R841	0700058	CARBON FILM 22KOHM+-5% 1/8W
R842	0700054	CARBON FILM 10KOHM+-5% 1/8W
R843	0700045	CARBON FILM 2.2KOHM+-5% 1/8W

SYMBOL-NO	P-NO	DESCRIPTION
R846	0700039	CARBON FILM 820 OHM+-5% 1/8W
R847	0700054	CARBON FILM 10KOHM+-5% 1/8W
R848L	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R848R	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R901	0700018	CARBON FILM 22 OHM+-5% 1/8W
R902	0700018	CARBON FILM 22 OHM+-5% 1/8W
R903	0700054	CARBON FILM 10KOHM+-5% 1/8W
R904	0700049	CARBON FILM 4.7KOHM+-5% 1/8W
R905	0700049	CARBON FILM 4.7KOHM+-5% 1/8W
R906	0700049	CARBON FILM 4.7KOHM+-5% 1/8W
R907	0700049	CARBON FILM 4.7KOHM+-5% 1/8W
R908	0700054	CARBON FILM 10KOHM+-5% 1/8W
R909	0700054	CARBON FILM 10KOHM+-5% 1/8W
R910	0700054	CARBON FILM 10KOHM+-5% 1/8W
R911	0700054	CARBON FILM 10KOHM+-5% 1/8W
R912	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R913	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R914	0700067	CARBON FILM 100KOHM+-5% 1/8W
R915	0101765	RESISTOR 10KOHM+-1% 1/8W
R916	0700054	CARBON FILM 10KOHM+-5% 1/8W
R917	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R918	0700063	CARBON FILM 47KOHM+-5% 1/8W
R920	0700063	CARBON FILM 47KOHM+-5% 1/8W
R921	0700063	CARBON FILM 47KOHM+-5% 1/8W
R923	0700054	CARBON FILM 10KOHM+-5% 1/8W
R924	0700054	CARBON FILM 10KOHM+-5% 1/8W
R925	0700054	CARBON FILM 10KOHM+-5% 1/8W
R926	0700054	CARBON FILM 10KOHM+-5% 1/8W
R927	0700054	CARBON FILM 10KOHM+-5% 1/8W
R928	0700032	CARBON FILM 220 OHM+-5% 1/8W
R929	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R930	0700058	CARBON FILM 22KOHM+-5% 1/8W
R931	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R932	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R933	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R934	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R935	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R936	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R937	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R938	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R939	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R941	0700054	CARBON FILM 10KOHM+-5% 1/8W
R942	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R943	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R945	0101868	CARBON FILM 4.7MOHM+-5% 1/4W
R946	0700072	CARBON FILM 220KOHM+-5% 1/8W
R950	0700058	CARBON FILM 22KOHM+-5% 1/8W
R951	0700058	CARBON FILM 22KOHM+-5% 1/8W
R952	0700054	CARBON FILM 10KOHM+-5% 1/8W
R953	0700054	CARBON FILM 10KOHM+-5% 1/8W
R954	0700061	CARBON FILM 33KOHM+-5% 1/8W
R955	0700061	CARBON FILM 33KOHM+-5% 1/8W
R956	0700031	CARBON FILM 180 OHM+-5% 1/8W
R957	0700033	CARBON FILM 270 OHM+-5% 1/8W
R958	0700067	CARBON FILM 100KOHM+-5% 1/8W
R959	0700067	CARBON FILM 100KOHM+-5% 1/8W
R960	0700067	CARBON FILM 100KOHM+-5% 1/8W
R961	0700067	CARBON FILM 100KOHM+-5% 1/8W
R964	0700062	CARBON FILM 39KOHM+-5% 1/8W
R972	0700066	CARBON FILM 82KOHM+-5% 1/8W
R973	0700066	CARBON FILM 82KOHM+-5% 1/8W
R974	0700063	CARBON FILM 47KOHM+-5% 1/8W
R975	0700054	CARBON FILM 10KOHM+-5% 1/8W
R976	0700041	CARBON FILM 1.0KOHM+-5% 1/8W[CT,VPS]
R977	0700041	CARBON FILM 1.0KOHM+-5% 1/8W[UKN]

SYMBOL-NO	P-NO	DESCRIPTION
⚠RF901	0170471	FUSE RESISTOR 2.2 OHM+-5% 1/4W
RT301	5030084	TRIMMER 1KOHM
RT401	5006241	SEMI VARIABLE 100KOHM
RT501L	AW10117	TIMMER RESISTOR 10KOHM 3-10W
RT501R	AW10116	TIMMER RESISTOR 4.7KOHM 3-10W
RT601	5030012	SEMI VARIABLE 220KOHM
		SEMI-CONDUCTORS
D1411	5339131	DIODE 1SS254
D1501	5339131	DIODE 1SS254
D201	5339131	DIODE 1SS254
D202	5339131	DIODE 1SS254
D204	5339131	DIODE 1SS254
D2101	5380933	LED GL451
D3501	5339131	DIODE 1SS254
D3502	5339131	DIODE 1SS254
D404	5339131	DIODE 1SS254
D405	5339131	DIODE 1SS254
D406	5339131	DIODE 1SS254
D503	5339131	DIODE 1SS254
D504	5339131	DIODE 1SS254
D601	5339231	DIODE 1SR35-100A
D602	5339231	DIODE 1SR35-100A
D806	5339131	DIODE 1SS254
D811	5339131	DIODE 1SS254
D812	5339131	DIODE 1SS254
D842	5339551	DIODE SS1J4
D843	5339551	DIODE SS1J4
D906	5339131	DIODE 1SS254[UKN]
D908	5339131	DIODE 1SS254[VPS]
D909	5339131	DIODE 1SS254
D910	5339131	DIODE 1SS254
D914	5339551	DIODE SS1J4
D915	5339131	DIODE 1SS254
D916	5339131	DIODE 1SS254
D917	5339131	DIODE 1SS254
D918	5339131	DIODE 1SS254
D921	5339131	DIODE 1SS254[UKN]
D924	5339131	DIODE 1SS254[UKN]
D925	5339131	DIODE 1SS254[UKN]
IC1401	1340782	IC M35010-013SP
IC1441	1361932	IC BA7046A
IC1502	1342031	IC NJM2248S
IC1503	1387912	PWB ASSY HES8052A[VPS]
IC1801	1365802	IC CF70091A[UKN]
IC1802	1343511	IC TDA1543[UKN]
IC1803	5364761	IC BA4560[UKN]
IC1804	1345961	IC BA3129D[UKN]
IC1806	1388951	IC AFS816F[UKN]
IC1851	1346171	IC TDA8417[CT,VPS]
IC1852	1346191	IC TDA9821[CT,VPS]
IC201	1374201	MODULE HT7278
IC202	1345831	IC MSM7403RS
IC2101	5327521	PHOTO TRANSISTOR SPI-315-C
IC2102	5327521	PHOTO TRANSISTOR SPI-315-C
IC401	5300641	IC BA7755
IC4501	1346641	IC MM1031XS
IC501	1365754	IC AN3961NFBPAA
IC502	5366911	IC BA6138
IC503	5350601	IC NJM4558D[CT,VPS]
IC601	1345871	IC HD49781NT
IC651	5350601	IC NJM4558D
IC821L	5366981	IC M5201L
IC821R	5366981	IC M5201L

SYMBOL-NO	P-NO	DESCRIPTION
IC901	1366585	IC M38184M8-226FP[UKN, VPS]
IC901	1366587	IC M38184M8-227FP[CT]
IC902	1345903	IC PST600G
IC903	1361213	IC X24C01AP
IC904	5300794	IC BA6209U4
Q1411	5327063	TRANSISTOR 2SC1740S
Q1412	5327063	TRANSISTOR 2SC1740S
Q1451	5327063	TRANSISTOR 2SC1740S
Q1501	5327031	TRANSISTOR 2SA673(C)
Q1502	5327021	TRANSISTOR 2SA844CD
Q1503	5327073	TRANSISTOR DTC144ES
Q1505	5327062	TRANSISTOR 2SC1740S-R
Q1804	5327063	TRANSISTOR 2SC1740S[UKN]
Q201	5327102	TRANSISTOR 2SC3533-BC
Q202	5327063	TRANSISTOR 2SC1740S
Q203	5327071	TRANSISTOR DTC124ES
Q204	5327063	TRANSISTOR 2SC1740S
Q205	5327063	TRANSISTOR 2SC1740S
Q206	1320004	TRANSISTOR 2SA854SQR
Q207	1320004	TRANSISTOR 2SA854SQR
Q208	5327071	TRANSISTOR DTC124ES
Q210	5327063	TRANSISTOR 2SC1740S
Q2101	5324661	PHOTO TRANSISTOR PT-483F1H
Q2102	5324661	PHOTO TRANSISTOR PT-483F1H
Q211	5327073	TRANSISTOR DTC144ES[CT, VPS]
Q212	5327073	TRANSISTOR DTC144ES
Q213	1320004	TRANSISTOR 2SA854SQR
Q214	5327073	TRANSISTOR DTC144ES
Q215	5327073	TRANSISTOR DTC144ES
Q216	5327073	TRANSISTOR DTC144ES
Q217	5327063	TRANSISTOR 2SC1740S
Q301	5327063	TRANSISTOR 2SC1740S
Q302	5327063	TRANSISTOR 2SC1740S
Q303	5327063	TRANSISTOR 2SC1740S
Q304	5327063	TRANSISTOR 2SC1740S
Q305	1320004	TRANSISTOR 2SA854SQR
Q306	5327063	TRANSISTOR 2SC1740S
Q307	5327063	TRANSISTOR 2SC1740S
Q309	1320004	TRANSISTOR 2SA854SQR
Q401	5327031	TRANSISTOR 2SA673(C)
Q402	5327102	TRANSISTOR 2SC3533-BC
Q403	5327073	TRANSISTOR DTC144ES
Q404	5327062	TRANSISTOR 2SC1740S-R
Q406	5327073	TRANSISTOR DTC144ES[UKN]
Q408	5327073	TRANSISTOR DTC144ES
Q502	5327021	TRANSISTOR 2SA844CD
Q503L	5327062	TRANSISTOR 2SC1740S-R
Q503R	5327062	TRANSISTOR 2SC1740S-R
Q505	5327062	TRANSISTOR 2SC1740S-R
Q506	5327073	TRANSISTOR DTC144ES
Q509	5327062	TRANSISTOR 2SC1740S-R
Q601	5327063	TRANSISTOR 2SC1740S
Q811	5327073	TRANSISTOR DTC144ES
Q812	5327031	TRANSISTOR 2SA673(C)
Q816	5327021	TRANSISTOR 2SA844CD
Q821	5327073	TRANSISTOR DTC144ES
Q841	5327073	TRANSISTOR DTC144ES
Q842	5327073	TRANSISTOR DTC144ES
Q843	5327021	TRANSISTOR 2SA844CD
Q846	5327073	TRANSISTOR DTC144ES
Q847	5327031	TRANSISTOR 2SA673(C)
Q901	5327073	TRANSISTOR DTC144ES
QR1801	5327075	TRANSISTOR XDC144ES[UKN]
RM751	1388711	PWB ASSY SBX1644[UKN]
RM751	1388911	LIGHT DETECTING UNITGP1U581X[CT, VPS]

SYMBOL-NO	P-NO	DESCRIPTION
ZD1501	5339406	DIODE UTZJ30C
ZD901	5339572	DIODE UTZJ5.1A
ZD903	5339462	ZENER DIODE HZS12A1
		TRANSFORMER
T401	5261533	TRANSFORMER
		COILS
L1401	5121294	COIL 100UH
L1402	5121288	COIL 15UH
L1441	5121294	COIL 100UH
L1503	5159077	CHOKE COIL 100UH+-10%
L1504	5159077	CHOKE COIL 100UH+-10%
L1505	5159077	CHOKE COIL 100UH+-10%
L1506	5159077	CHOKE COIL 100UH+-10%
L1507	5121294	COIL 100UH
L1508	5159077	CHOKE COIL 100UH+-10%
L1801	5159153	CHOKE COIL 82UH[UKN]
L1802	0770057	CHOKE COIL 100UH+-5%[UKN]
L201	5159077	CHOKE COIL 100UH+-10%
L202	5159147	CHOKE COIL 33UH
L203	5159143	CHOKE COIL 15UH
L204	5159143	CHOKE COIL 15UH
L205	5159153	CHOKE COIL 82UH
L206	5159157	CHOKE COIL 180UH
L207	5159145	CHOKE COIL 22UH
L208	5159141	CHOKE COIL 10UH
L209	5159151	CHOKE COIL 56UH
L210	5159147	CHOKE COIL 33UH
L211	5159144	CHOKE COIL 18UH
L212	5159147	CHOKE COIL 33UH
L213	5159155	CHOKE COIL 120UH+-10%
L214	5159154	CHOKE COIL 100UH
L215	5159154	CHOKE COIL 100UH
L216	5159153	CHOKE COIL 82UH
L301	5159077	CHOKE COIL 100UH+-10%
L302	5159143	CHOKE COIL 15UH
L303	0770068	CHOKE COIL 680UH+-5%
L304	0770064	CHOKE COIL 330UH+-5%
L306	0770064	CHOKE COIL 330UH+-5%
L308	5159148	CHOKE COIL 39UH
L309	5159149	CHOKE COIL 47UH
L3501	5121294	COIL 100UH
L401	5159077	CHOKE COIL 100UH+-10%
L402	5159113	COIL,CHOKE 8.2MH
L403	5159077	CHOKE COIL 100UH+-10%
L502	0770057	CHOKE COIL 100UH+-5%
L503	0770057	CHOKE COIL 100UH+-5%
		CRYSTALS
X1401	5778462	CRYSTAL
X1801	5779141	CLYSTAL[UKN]
X1851	5781631	CRYSTALCT, VPS]
X301	5778871	CRYSTAL
X901	5779111	CRYSTAL
X902	5783003	CRYSTAL
		MISCELLANEOUS
BL3501	5272378	LC FILTER
BL3502	5272378	LC FILTER
BL4501L	5272378	LC FILTER[VPS]

SYMBOL-NO	P-NO	DESCRIPTION
BL4501R	5272378	LC FILTER[VPS]
BL4502L	5272378	LC FILTER[VPS]
BL4502R	5272378	LC FILTER[VPS]
BL4503L	5272378	LC FILTER[VPS]
BL4503R	5272378	LC FILTER[VPS]
BL4504L	5272378	LC FILTER[VPS]
BL4504R	5272378	LC FILTER[VPS]
BL901	5272376	FILTER
CF1851	5160561	FILTER[CT, VPS]
CF1852	5160562	FILTER[CT, VPS]
CP1801	5165391	FILTER[UKN]
CP301	5786122	DELAY LINE
DG901	5315403	FLUORESCENT INDICATOR TUBE
J3501	5676663	JACK
J3502	5676665	JACK
J3503	5674611	JACK
J3504	5676666	JACK
J4501	5677512	JACK
J4502	5677511	JACK
S2101	5635631	SWITCH
S2102	5635331	SWITCH
S2104	5610891	SWITCH
S751	5634884	SWITCH
S752	5634884	SWITCH
S753	5634884	SWITCH
S755	5634884	SWITCH
S758	5634884	SWITCH
S759	5634884	SWITCH
S760	5634884	SWITCH
S761	5634884	SWITCH
S770	5634884	SWITCH

PRE AMP/HEAD SW SECTION

CAPACITORS

C0001	0800186	ELECTROLYTIC 47UF 16V
C0002	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C0003	0890016	CERAMIC DISC 39PF+-50% 50V
C0004	0800173	ELECTROLYTIC 0.33UF 50V
C0005	0890043	CERAMIC DISC 0.01UF+-20% 16V
C0006	0890033	CERAMIC DISC 680PF+-10% 50V
C0007	0890045	CERAMIC DISC 0.047UF+80-20% 50V
C0008	0890014	CERAMIC DISC 27PF+-50% 50V
C0009	0890043	CERAMIC DISC 0.01UF+-20% 16V
C0010	0890016	CERAMIC DISC 39PF+-50% 50V
C0011	0800185	ELECTROLYTIC 47UF 6.3V
C0012	0890029	CERAMIC DISC 390PF+-10% 50V
C0013	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C0014	0800185	ELECTROLYTIC 47UF 6.3V
C0015	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C0016	0800185	ELECTROLYTIC 47UF 6.3V
C0017	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C0018	0890015	CERAMIC DISC 33PF+-50% 50V
C0019	0890046	CERAMIC DISC 0.1UF+80-20% 50V
C0020	0890046	CERAMIC DISC 0.1UF+80-20% 50V
C0021	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C0022	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C0023	0890046	CERAMIC DISC 0.1UF+80-20% 50V
C0024	0890046	CERAMIC DISC 0.1UF+80-20% 50V[UKN]
C0025	0890014	CERAMIC DISC 27PF+-50% 50V[UKN]
C0026	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C0027	0890043	CERAMIC DISC 0.01UF+-20% 16V
C0028	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C0029	0800185	ELECTROLYTIC 47UF 6.3V
C0030	0890013	CERAMIC DISC 22PF+-5% 50V
C0031	0800173	ELECTROLYTIC 0.33UF 50V
C0032	0890045	CERAMIC DISC 0.047UF+80-20% 50V
C0033	0890022	CERAMIC DISC 100PF+-10% 50V
C0034	0800175	ELECTROLYTIC 1.0UF 50V
C0035	0890043	CERAMIC DISC 0.01UF+-20% 16V
C0036	0890013	CERAMIC DISC 22PF+-5% 50V
C0037	0890013	CERAMIC DISC 22PF+-5% 50V
C0038	0890043	CERAMIC DISC 0.01UF+-20% 16V
C0039	0800175	ELECTROLYTIC 1.0UF 50V
C0040	0800173	ELECTROLYTIC 0.33UF 50V
C0041	0890043	CERAMIC DISC 0.01UF+-20% 16V
C0042	0890043	CERAMIC DISC 0.01UF+-20% 16V
C0043	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C0044	0800185	ELECTROLYTIC 47UF 6.3V
C0045	0890043	CERAMIC DISC 0.01UF+-20% 16V
C0046	0890043	CERAMIC DISC 0.01UF+-20% 16V
C0047	0890027	CERAMIC DISC 270PF+-10% 50V
C0048	0890018	CERAMIC DISC 56PF+-50% 50V
C0049	0890043	CERAMIC DISC 0.01UF+-20% 16V
C0050	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C0051	0890043	CERAMIC DISC 0.01UF+-20% 16V
C0052	0890046	CERAMIC DISC 0.1UF+80-20% 50V
C0053	0800173	ELECTROLYTIC 0.33UF 50V
C0059	0890046	CERAMIC DISC 0.1UF+80-20% 50V
C0060	0890014	CERAMIC DISC 27PF+-50% 50V
C0061	0890014	CERAMIC DISC 27PF+-50% 50V

RESISTORS

R0001	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R0002	0700037	CARBON FILM 560 OHM+-5% 1/8W
R0003	0700032	CARBON FILM 220 OHM+-5% 1/8W
R0004	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R0005	0700038	CARBON FILM 680 OHM+-5% 1/8W
R0006	0700027	CARBON FILM 100 OHM+-5% 1/8W
R0007	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R0009	0700032	CARBON FILM 220 OHM+-5% 1/8W
R0010	0700027	CARBON FILM 100 OHM+-5% 1/8W
R0011	0700036	CARBON FILM 470 OHM+-5% 1/8W
R0012	0700021	CARBON FILM 39 OHM+-5% 1/8W
R0014	0700027	CARBON FILM 100 OHM+-5% 1/8W
R0015	0700027	CARBON FILM 100 OHM+-5% 1/8W
R0016	0700021	CARBON FILM 39 OHM+-5% 1/8W
R0018	0700036	CARBON FILM 470 OHM+-5% 1/8W[UKN]
R0019	0700027	CARBON FILM 100 OHM+-5% 1/8W
R0020	0700027	CARBON FILM 120 OHM+-5% 1/8W[UKN]
R0021	0700027	CARBON FILM 120 OHM+-5% 1/8W[UKN]
R0022	0700054	CARBON FILM 10KOHM+-5% 1/8W[UKN]
R0023	0700054	CARBON FILM 10KOHM+-5% 1/8W[UKN]
R0024	0700039	CARBON FILM 820 OHM+-5% 1/8W
R0025	0700052	CARBON FILM 6.8KOHM+-5% 1/8W
R0026	0700061	CARBON FILM 33KOHM+-5% 1/8W
R0028	0700047	CARBON FILM 3.3KOHM+-5% 1/8W[UKN]
R0029	0700027	CARBON FILM 100 OHM+-5% 1/8W
R0031	0700054	CARBON FILM 10KOHM+-5% 1/8W[UKN]
R0032	0700014	CARBON FILM 10 OHM+-5% 1/8W
R0033	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R0034	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R0035	0700054	CARBON FILM 10KOHM+-5% 1/8W
R0036	0700054	CARBON FILM 10KOHM+-5% 1/8W
R0037	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R0038	0700047	CARBON FILM 3.3KOHM+-5% 1/8W
R0039	0700061	CARBON FILM 33KOHM+-5% 1/8W
R0040	0700058	CARBON FILM 22KOHM+-5% 1/8W

SYMBOL-NO	P-NO	DESCRIPTION
R0041	0700067	CARBON FILM 100KOHM+-5% 1/8W
R0042	0700048	CARBON FILM 3.9KOHM+-5% 1/8W
R0043	0700053	CARBON FILM 8.2KOHM+-5% 1/8W
R0044	0700054	CARBON FILM 10KOHM+-5% 1/8W
R0045	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R0046	0700054	CARBON FILM 10KOHM+-5% 1/8W
R0047	0700027	CARBON FILM 100 OHM+-5% 1/8W
R0048	0700043	CARBON FILM 1.5KOHM+-5% 1/8W
R0049	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R0050	0700063	CARBON FILM 47KOHM+-5% 1/8W
R0051	0700054	CARBON FILM 10KOHM+-5% 1/8W
R0052	0700061	CARBON FILM 33KOHM+-5% 1/8W
R0053	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R0062	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R0063	0700039	CARBON FILM 820 OHM+-5% 1/8W
		SEMI-CONDUCTORS
D0001	5339131	DIODE 1SS254[UKN]
IC0001	1362321	IC HA118162NT
IC0002	1361752	IC XRA7740S
IC0003	1361731	IC BA7047S
Q0001	5327063	TRANSISTOR 2SC1740S
Q0003	5327063	TRANSISTOR 2SC1740S
Q0004	5327063	TRANSISTOR 2SC1740S[UKN]
Q0005	5327063	TRANSISTOR 2SC1740S[UKN]
Q0006	5327075	TRANSISTOR XDC144ES[UKN]
Q0007	5327075	TRANSISTOR XDC144ES[UKN]
		COILS
L0001	5159077	CHOKE COIL 100UH+-10%
L0002	5159154	CHOKE COIL 100UH
L0003	5159146	CHOKE COIL 27UH
L0004	0770057	CHOKE COIL 100UH+-5%
L0005	0770057	CHOKE COIL 100UH+-5%
L0006	0770057	CHOKE COIL 100UH+-5%
L0007	5159154	CHOKE COIL 100UH
L0008	5159154	CHOKE COIL 100UH[UKN]
L0009	0770057	CHOKE COIL 100UH+-5%
L0010	5159148	CHOKE COIL 39UH
L0011	0770057	CHOKE COIL 100UH+-5%
L0012	5159158	CHOKE COIL 220UH
L0015	5159147	CHOKE COIL 33UH
L0016	5159147	CHOKE COIL 33UH
		POWER SUPPLY [SWR] SECTION
		CAPACITORS
C 1	0268741	POLYESTER FILM 0.1UF+-20% 250V
C 2	0268741	POLYESTER FILM 0.1UF+-20% 250V
⚠C 4	0268532	POLYESTER FILM 0.047UF+-10% 250V
⚠C 5	0235378	CERAMIC DISK 82PF+-5% 1KV
C 8	0880009	POLYESTER FILM 0.01UF+-10% 50V
C 9	0890083	CERAMIC DISC 470PF+-10% 50V
C10	0209774	CERAMIC DISC 0.033UF+-20% 50V
C11	0800193	ELECTROLYTIC 10UF 50V
C12	0207701	ELECTROLYTIC 470UF 16V
C13	0207701	ELECTROLYTIC 470UF 16V
C14	0268241	MYLAR 0.001UF+-10% 50V[CT,VPS]
C15	0800193	ELECTROLYTIC 10UF 50V
C16	0254322	ELECTROLYTIC 470UF 10V
C17	0254322	ELECTROLYTIC 470UF 10V
C19	0209641	CERAMIC DISC 10000PF+-10% 16V

SYMBOL-NO	P-NO	DESCRIPTION
C21	0890043	CERAMIC DISC 0.01UF+-20% 16V
C22	0204316	POLYESTER FILM 1000PF+-5% 50V[CT,VPS]
C23	0207653	ELECTROLYTIC 100UF 10V
C24	0890043	CERAMIC DISC 0.01UF+-20% 16V
C25	0890043	CERAMIC DISC 0.01UF+-20% 16V
⚠C27	0249678	CERAMIC DISC 220PF+-10%
⚠C28	0249678	CERAMIC DISC 220PF+-10%
⚠C29	0249678	CERAMIC DISC 220PF+-10%
⚠C30	0235991	CERAMIC CHIP 4700PF+-20% 250V[CT,VPS]
⚠C30	0249677	CERAMIC DISC 3300PF+-20%[UKN]
⚠C31	0235991	CERAMIC CHIP 4700PF+-20% 250V[CT,VPS]
⚠C31	0249677	CERAMIC DISC 3300PF+-20%[UKN]
⚠C32	0235991	CERAMIC CHIP 4700PF+-20% 250V[CT,VPS]
C32	0249677	CERAMIC DISC 3300PF+-20%[UKN]
C33	0890043	CERAMIC DISC 0.01UF+-20% 16V
C34	0800385	ELECTROLYTIC 4.7UF+-20% 35V
C35	0800385	ELECTROLYTIC 4.7UF+-20% 35V
C36	0800205	ELECTROLYTIC 0.47UF 50V
C37	0800205	ELECTROLYTIC 0.47UF 50V
C38	0890043	CERAMIC DISC 0.01UF+-20% 16V
C39	0890087	CERAMIC 1000PF+-10% 50V[CT,VPS]
C40	0254322	ELECTROLYTIC 470UF 10V
C41	0890044	CERAMIC DISC 0.022UF+80-20% 25V
C42	0890043	CERAMIC DISC 0.01UF+-20% 16V
C43	0880007	POLYESTER FILM 4700PF+-10% 50V
C44	0209774	CERAMIC DISC 0.033UF+-20% 50V
		RESISTORS
R 2	0101963	CARBON FILM 330KOHM+-5% 1/4W
R 3	0101958	CARBON FILM 120KOHM+-5% 1/8W
R 4	0101958	CARBON FILM 120KOHM+-5% 1/8W
R 5	0116057	METAL OXIDE 47KOHM+-5% 3W
R 6	0116064	METAL OXIDE FILM 270 OHM+-5% 1W
R 7	0101931	CARBON FILM 680 OHM+-5% 1/8W
R 8	0700077	CARBON FILM 560KOHM+-5% 1/8W
R 9	0171287	METAL FILM 0.24OHM+-5% 1W
R10	0700029	CARBON FILM 150 OHM+-5% 1/8W
R11	0700054	CARBON FILM 10KOHM+-5% 1/8W
R12	0700034	CARBON FILM 330 OHM+-5% 1/8W
R13	0700024	CARBON FILM 56 OHM+-5% 1/8W
R14	0700049	CARBON FILM 4.7KOHM+-5% 1/8W
R15	0700038	CARBON FILM 680 OHM+-5% 1/8W
R16	0101759	METAL FILM 2.2KOHM+-1% 1/8W
R17	0101762	CHIP RESISTOR 3.9KOHM+-1% 1/8W
R18	0101763	RESISTOR 4.7KOHM+-1% 1/8W
R20	0700041	CARBON FILM 1.0KOHM+-5% 1/8W
R21	0700067	CARBON FILM 100KOHM+-5% 1/8W
R22	0700027	CARBON FILM 100 OHM+-5% 1/8W
R23	0101945	CARBON FILM 10KOHM+-5% 1/8W
R24	0700027	CARBON FILM 100 OHM+-5% 1/8W
R25	0101945	CARBON FILM 10KOHM+-5% 1/8W
R26	0101947	CARBON FILM 15KOHM+-5% 1/8W
R27	0700063	CARBON FILM 47KOHM+-5% 1/8W
R28	0101949	CARBON FILM 22KOHM+-5% 1/4W
R29	0700045	CARBON FILM 2.2KOHM+-5% 1/8W
R30	0101801	CARBON FILM 2.2 OHM+-5% 1/4W
R31	0700046	CARBON FILM 2.7KOHM+-5% 1/8W
R32	0116057	METAL OXIDE 47KOHM+-5% 3W
R33	0700058	CARBON FILM 22KOHM+-5% 1/8W
R34	0700058	CARBON FILM 22KOHM+-5% 1/8W
R35	0700067	CARBON FILM 100KOHM+-5% 1/8W
R36	0101717	RESISTOR 68 OHM+-5% 1/6W
R37	0170641	METAL FILM 1MOHM+-5% 1/2W
R38	0101947	CARBON FILM 15KOHM+-5% 1/8W

SYMBOL-NO	P-NO	DESCRIPTION
		SEMI-CONDUCTORS
⚠D 1	5336552	DIODE S1WBA60
D 2	5336323	DIODE EG01C-P
D 3	5339131	DIODE 1SS254
D 4	5339131	DIODE 1SS254
D 8	5336402	DIODE RU4YX-SF
D 9	5336811	DIODE MA2180A
D10	5339591	DIODE D1NK40H
D11	5339431	DIODE 1SS244
D12	5333344	DIODE EK14-F7
D13	5339591	DIODE D1NK40H
D14	5339252	DIODE HZS5-C2
D15	5339484	DIODE HZS12B3T
D16	5339294	DIODE HZS11B1
D17	5339255	DIODE HZS12-C3T
IC 1	1322592	TRANSISTOR PC111L-B
IC 2	1360452	IC TL431CLP
Q 1	5327541	TRANSISTOR 2SK1198
Q 2	1320003	TRANSISTOR 2SA854(S)
Q 3	1321341	TRANSISTOR 2SD1765
Q 4	1321341	TRANSISTOR 2SD1765
Q 5	1321341	TRANSISTOR 2SD1765
Q 6	5327063	TRANSISTOR 2SC1740S
Q 7	5327202	TRANSISTOR 2SC1741SR
Q 8	1320003	TRANSISTOR 2SA854(S)
⚠QF 1	5721941	IC PROTECTOR
⚠QF 2	5721945	IC PROTECTOR, ICP-N38
⚠QF 4	5721945	IC PROTECTOR, ICP-N38
		TRANSFORMER
⚠T 1	5214562	POWER TRANSFORMER
		COILS
⚠L 1	5220242	COIL
⚠L 2	5220242	COIL
L 3	5272212	CORE
L 4	5152733	CHOKE COIL 10UH+-10%
L 5	5152733	CHOKE COIL 10UH+-10%
L 7	5272212	CORE
L 8	5272212	CORE
L 9	5272212	CORE[CT, VPS]
L10	5272212	CORE[CT, VPS]
		MISCELLANEOUS
⚠F 1	5723261	FUSE

HITACHI

VT-F350E(UKN)
VT-F350E(CT)
VT-F355E(VPS)

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